

WITTGENSTEIN'S EARLY PHILOSOPHY

edited by José L. Zalabardo

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José L. Zalabardo





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Introduction*

The present volume collects nine previously unpublished essays on the philosophy of Ludwig Wittgenstein, focusing mainly on his early work. They don't belong to a particular exegetical school. They approach Wittgenstein's work directly, seeking to understand it in its own terms and by reference to the context in which it was produced. They cover a wide range of aspects of Wittgenstein's early philosophy, but they can be broadly clustered as focusing on three areas: the relationship between Wittgenstein's account of representation and Russell's theories of judgement, the role of objects in the tractarian system, and Wittgenstein's philosophical method. The goal of this Introduction is to provide a brief but opinionated overview of some of the main issues in these areas, and to summarize the contribution to these debates of the chapters that follow.

1. Judgement

Wittgenstein's concern with Russell's theories of judgement has long been apparent. It is well documented in the pre-Tractarian manuscripts published in 1961 with the title *Notebooks 1914–1916* (Wittgenstein 1979), and it already receives the prominence it deserves in James Griffin's commentary, which includes a section entitled 'Wittgenstein's Theory of Judgment' (Griffin 1964: 112–24). However, the picture was hopelessly incomplete until the book manuscript that Russell worked on in May 1913 came to light in 1967 and was subsequently published as *Theory of Knowledge*, in Volume 7 of Russell's collected papers (Russell 1984). Only since this text has become

^{*} I am grateful to Michael Kremer for comments on this Introduction.

available have we been able to trace in detail the connection between Russell's and Wittgenstein's ideas on this point. This has produced invaluable insights into some of the central doctrines of the *Tractatus* (Wittgenstein 1974). There are several perspectives from which Wittgenstein's engagement with Russell's theory of judgement can be fruitfully approached. The chapters by Johnston, Hanks, and Candlish and Damnjanovic provide excellent examples of this. Here I want to briefly highlight one of these perspectives.

Between 1910 and 1913, Russell put forward three different versions of his multiple relation theory of judgement. On this theory, judgement is a relation that the mind bears to a plurality of items in the world—those items that would have to be combined with one another in a certain way in order for the judgement to be true. One of the problems that prompted this quick succession of proposals arises from the thought that an episode of judgement has to determine, not just *which* worldly items would have to be combined with one another in order to make the judgement true, but also *how* these items would have to be combined with one another in order to make the judgement true. I am going to refer to this as the *mode-of-combination problem*.¹

In *The Principles of Mathematics* (Russell 1903), Russell had solved the mode-of-combination problem by construing judgement as a dual (binary) relation between a judging mind and a proposition. This approach ensured that the relevant mode of combination was incorporated into the judgement complex, since propositions were conceived as complex items whose constituents are combined with one another in a certain way.

I want to highlight one feature of this strategy for solving the mode-of-combination problem. Notice that a judgement singles out the way in which the objects in the world would have to be combined with one another in order to make the judgement true by incorporating a complex—the proposition—in which the objects actually are combined in that

¹ This problem is different from what Nicholas Griffin has referred to as the *direction problem* (Griffin 1985). Unlike the narrow form of the direction problem, the mode-of-combination problem arises even in cases in which only one logically possible complex can be formed with the relevant worldly items. And unlike the wide form of the problem, the challenge is not to exclude logically impossible combinations, but to single out the form of combination that would have to be exhibited by the complex that makes the judgement true. See Stewart Candlish's discussion of the relationship between the direction problem and the problem of unity (Candlish 1996).

way. This raises the question, how a judgement manages to be false, since the existence of the judgement entails the existence of the complex that would make the judgement true. Russell's answer is that truth is a property that some propositions have and some lack: 'some propositions are true and some are false, just as some roses are red and some white' (Russell 1904: 75). For a judgement to be true, it's not enough that the corresponding complex exists. In addition, it has to be true.

Russell soon came to see this theory of judgement as unsatisfactory, and abandoned it in favour of the multiple relation theory. Now the items that in the 1903 theory were the constituents of the proposition entered the judgement complex separately. This change left Russell without the resources that he had deployed in his previous theory for solving the mode-of-combination problem. A different solution had to be found.

The first version of the multiple relation theory, presented in 'On the Nature of Truth and Falsehood' (Russell 1910), includes a feature that sustains a solution to the problem. According to Russell, throughout the period that interests us, the unity of an actual complex, a fact, is effected by the combining power of a relation. The relation that plays this role in each case is responsible for forming a unit out of the constituents of the complex. It follows that, on the multiple relation theory, a judgement complex has to involve two relations. On the one hand, it involves the judgement relation, which produces the judgement complex by combining its constituents. On the other hand, it involves the subordinate relation, the relation that would be responsible for the unity of the complex that would make the judgement true, if the judgement were in fact true. In the 1910 version of the multiple relation theory, Russell appears to assume that the subordinate relation combines its terms (the remaining constituents of the judgement complex, other than the judging mind) into some kind of unit (the subordinate complex). This is the 1910 solution to the mode-of-combination problem. By combining its terms into a unit, the subordinate relation singled out the way in which they would have to be combined in order to make the judgement true.

Notice that this solution to the mode-of-combination problem is essentially identical to the solution offered by the dual-relation theory, and opens the position to the same objections. This was noticed by G. F. Stout, who argued in an insightful critique (Stout 1911) that taking this line turned Russell's new theory into a version of the 1903 theory in disguise. If the

subordinate relation combines its terms into a unit, the resulting complex is the complex whose existence would make the judgement true. Hence, unless we revert to the account of truth that Russell now rejects, it is hard to see how a judgement could be false. In personal communication quoted by Stout, Russell accepted that the subordinate relation should not discharge any combining duties in the judgement complex. This led to the second version of the multiple relation theory, presented in chapter 12 of The Problems of Philosophy (Russell 1912). Now nothing but the judgement relation is assigned combining duties in the judgement complex: the subordinate relation, Russell tells us, 'is a brick in the structure, not the cement. The cement is the relation 'believing' [i.e. 'judging']' (Russell 1912: 128).

It should be clear, however, that this modification does not address the main difficulty. As Stout had observed in his paper, the issue is not which relation does the combining, but whether or not, in addition to the judgement complex, we recognize a subordinate complex in an episode of judgement. If we answer this question in the affirmative, false judgement becomes a problem, even if the unity of the subordinate combination is brought about, not by the subordinate relation, but by the judgement relation. If we answer the question in the negative, then we still don't have a solution to the mode-of-combination problem.

In the third version of the multiple relation theory, presented in the 1913 manuscript, Theory of Knowledge, Russell proposed a modification that was intended to address this difficulty. His proposal was to introduce a logical form as an additional component in each judgement complex.2 The logical form that figures in a judgement corresponds to the mode of combination that would have to be exhibited by the complex whose existence would make the judgement true.

This modification enables Russell to keep the idea that judgements produce subordinate complexes without jeopardizing false judgement. A subordinate complex is different from the complex whose existence would make the judgement true in that the former, but not the latter, has a logical form as one of its constituents. Hence the existence of the former doesn't entail the existence of the latter, and judgements can be false. In fact, one could argue that the introduction of logical forms renders subordinate complexes unnecessary, since the mere presence of a logical form as a

² On this account of the role of logical forms in the 1913 manuscript, see Hylton (1990: 345-6).

constituent of a judgement would suffice to single out the mode of combination that would have to be exhibited by objects in the world in order to make the judgement true.

This solution to the mode-of-combination problem requires that there should be objects (logical forms) corresponding to modes of combination, and that these objects can figure as constituents of judgement complexes. Concerning their nature, Russell settled on the view that logical forms are fully existentially generalized facts. Thus, for example, the logical form of subject-predicate complexes is the fact that some object has some property, and the logical form of dual complexes is the fact that some object bears some binary relation to some object. The need to treat logical forms as constituents of judgement complexes posed important hurdles, since Russell thought that the judging subject needs to be acquainted with the remaining constituents of the judgement complex. Hence the notion of acquaintance had to be stretched to include logical forms as possible objects of acquaintance.

We know that Wittgenstein was highly critical of Russell's 1913 manuscript, and that his criticisms played a major role in Russell's decision to abandon the work.3 Nevertheless, Wittgenstein's discussion of Russell's logical forms in the pre-Tractarian manuscripts gives the distinct impression that he thought there was something right about the idea. His attitude seems to be that Russell's position would be appealing if only we could find items capable of playing the role that Russell assigns to logical forms, but that unfortunately no such items are to be found, and, in particular, fully existentially generalized facts don't fit the bill.

I suggest that Wittgenstein's picture theory can be seen, in effect, as an application of Russell's idea—a strategy for rescuing the idea from the fact that there are no items that can play in judgements the role that Russell

³ See, for example, a letter of 19 June 1913: 'All that has gone wrong with me lately comes from Wittgenstein's attack on my work—I have only just realized this. It was very difficult to be honest about it, as it makes a large part of the book I meant to write impossible for years to come probably' (Griffin 1992: 448).

And in a letter of May 1916, looking back on that period: 'Do you remember that at the time when you were seeing Vittoz I wrote a lot of stuff about Theory of Knowledge, which Wittgenstein criticised with the greatest severity? His criticism, tho' I don't think you realised it at the time, was an event of firstrate importance in my life, and affected everything I've done since. I saw he was right, and I saw that I could not hope ever again to do fundamental work in philosophy. My impulse was shattered, like a wave dashed to pieces against a breakwater' (Russell 1998: 282).

assigned to logical forms. Wittgenstein's idea was that even though there are no items in the world that can successfully discharge the role of logical forms, it is unquestionable that a fact, an actually obtaining complex, has logical form, in that it has constituents which are combined with one another in a determinate way. So facts have logical forms, but the logical form of a fact is not a thing that can figure as a constituent in a judgement. This suggests that there might be a way, after all, of implicating a logical form is an episode of judgement. If the judgement involves a fact, then its logical form can be used to solve the mode-of-combination problem. The way in which objects would have to be combined with one another in order to make the judgement true is the way in which the constituents of the fact involved in the judgement are actually combined with one another. The pictures and propositional signs of the Tractatus are the facts that play this role. It is in order to play this role that pictures (2.141) and propositional signs (3.14) have to be facts.4 Only then will they bring to representational episodes the logical form that is required for solving the mode-ofcombination problem.5

Notice that Wittgenstein's solution to the mode-of-combination problem does not render false judgement impossible because the constituents of the fact that contributes its logical form are different from the objects that would have to be combined in the same way in order to make the judgement true. Wittgenstein credits the form of a picture with this achievement:

- 2.173 A picture represents its subject from a position outside it. (Its standpoint is its representational form.) That is why a picture represents its subject correctly or incorrectly.
- 2.22 What a picture represents it represents independently of its truth or falsity, by means of its pictorial form.
 - ⁴ This aspect of the picture theory was first brought to light by David Pears (1977).

⁵ In the Tractatus, the form of a state of affairs (2.033) and of a picture (2.15) is defined as the possibility of its structure—of the way in which its constituents are combined with one another. Notice, however, that this way of introducing the notion is a relatively late addition, not present in the Prototractatus (Wittgenstein 1971), and in any case it is not in conflict with my account of its origin. If the structure of the fact that John loves Mary is the fact that John stands in the relation of loving to Mary, and the form of this fact is a Russellian logical form—'that something stands in some relation to something', the form can be described as the possibility of the structure in that the structure is one of the possible ways of turning the form into a state of affairs (Brian McGuinness made this point in his seminal paper (McGuinness 2002a)).

Here Wittgenstein claims to have achieved with forms what Russell had hoped to achieve with them.

Three of the chapters in this collection focus on aspects of Wittgenstein's views that are directly related to his reactions to Russell's theories of judgement.

Colin Johnston's essay (Chapter 1) focuses on Wittgenstein's objection to Russell's multiple relation theory. Johnston argues that Wittgenstein's contention that Russell's theory does not make nonsense judgement impossible threatens a principle of substitutability that played a central role in Russell's overall position: if two entities appear in two logically possible complexes in the same mode, then the result of substituting one for the other is a logically possible complex. This principle is undermined by the fact that, according to the multiple relation theory, the subordinate relation occurs in a judgement complex as a term, not as a relating relation. It follows from this and the principle of substitutability that the logically impossible complex of S judging that this table penholders the book has to be a logically possible complex. In the presence of the multiple relation theory, this is a reductio of substitutability. As Johnston argues, the problem is not addressed by the introduction of logical forms in the 1913 version of the theory.

In Chapter 2, Peter Hanks traces the evolution of Wittgenstein's ideas on judgement, from the account put forward in the 'Notes on Logic' to the position of the Tractatus. He argues that both positions can be seen as attempts to overcome the dilemma that results from the following theses concerning the occurrence of p in 'A judges p': (a) that it cannot occur as an argument to a predicate (and doesn't occur as an input to a truth function) and (b) that it must occur as a complete proposition. According to Hanks, the 'Notes on Logic' overcome this dilemma by reference to the bipolarity of p. This makes the occurrence of p in 'A believes p' different from the occurrence of an object as a relatum of a standard binary relation while allowing p to figure in the proposition as a unit. The theory of judgement presented in section 5.542 of the Tractatus provides a different strategy for overcoming the dilemma. Now judgement sentences are seen as vehicles for putting two sentences on display, that is, "p" and 'p'; 'p' is a fact in which names for objects are combined so as to depict a combination of these objects. And "p", Hanks explains, is not a name for 'p', but a fact in which names for names are combined so as to depict 'p'. Putting the two sentences

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on display side by side enables us to see the correlations between the constituents of the proposition and the objects in the world they stand for.

The topic of Stewart Candlish and Nic Damnjanovic's essay (Chapter 3) is Wittgenstein's solutions to the constellation of problems denoted by the label the unity of the proposition. Russell had tried to solve these problems with his theories of judgement, but Candlish and Damnjanovic argue that Wittgenstein's solutions are much closer to Frege's than to Russell's. They contend that the central idea of Wittgenstein's solutions to some of these problems is to deny that propositions are intrinsically representational unities. On Candlish and Damnjanovic's reading, Wittgenstein's idea that propositional signs are facts enables him to explain the difference between a proposition and its constituents, while the thought is that propositions are propositional signs in their projective relation to the world enables Wittgenstein to sidestep the difficulties involved in the idea of a thing, on its own, either possessing or being representational content. Propositional signs have representational properties only because of the way we use them—that is, because we use them as pictures.

2. Objects

The *Tractatus* puts forward two parallel doctrines about the structure of the world and language. On the one hand, the world consists of states of affairs that are logically independent of one another, and states of affairs are concatenations of simple objects. On the other hand, all propositions can be analysed as truth functions of elementary propositions that have states of affairs as their sense, and elementary propositions are concatenations of names that stand for simple objects. These doctrines suggest a metaphysical picture according to which simple objects are the ultimate constituents of reality and a semantic picture according to which names are the ultimate building blocks of language. States of affairs and propositions are, on this reading, mere staging posts in the process of metaphysical and linguistic analysis that has simple objects and names as its proper terminus.

However, we can find extensive evidence in the *Tractatus* in support of a reversal in the order of priority, between objects and states of affairs, on the metaphysical side, and propositions and names, on the linguistic side. On

this alternative picture, states of affairs and propositions are the more fundamental notions, with objects and names playing a derivative role.

On the linguistic side, this alternative picture can be grounded in the prominent role that Wittgenstein accords to Frege's context principle: 'Only propositions have sense; only in the nexus of a proposition does a name have a meaning' (3.3). The 3.31s, the first group of sections depending on 3.3 in the numerical hierarchy, offer a detailed elaboration of the idea. Here Wittgenstein tells us that expressions (parts of a proposition that characterize its sense, *including names*) are what propositions can have in common with one another (3.31), common characteristic marks of classes of propositions (3.311). On this picture, propositions are indivisible units, not the result of a process of composition. Expressions are simply similarities that we find between these fundamental units. The view is strongly reminiscent of the position that Hans Sluga has attributed to Frege, as the principle of the priority of judgement over concept:

[c]oncepts must not be considered as given independently of the judgments in which they occur. [...] Concepts are always reached through the splitting up of judgments, through analysis; they are not given separately and the judgment is not composed out of previously given constituents. (Sluga 1987: 86)

Whether or not Sluga is right in attributing this picture to Frege, the 3.31s offer compelling evidence that this is the right account of how propositions relate to their constituents in the *Tractatus*.⁶

On the metaphysical side, the evidence for this reversal of priorities is even more prominently displayed. The very first section of the *Tractatus* tells us that the world is all that is the case, and in case the point is not sufficiently clear, the next section adds that the world is the totality of facts, not of things. On the most natural reading of these sections, they tell us that facts, not things, are the ultimate constituents of reality, just as, according to the 3.31s propositions, not names, are the most fundamental self-standing linguistic units.⁷ The 2.01s then articulate the relationship between states of affairs and objects, and here the dependence of the latter on the former is emphasized: 'It is essential to things that they should be possible constituents

⁶ For this account of the relationship between names and propositions in the Tractatus, see Ishiguro (1969); McGuinness (2002b).

⁷ To avoid reading these passages as making this point, one needs to read 1.1 as saying that the world is the totality of facts as well as things. On this reading, see Johnston (2007: esp. sec. 3).

of states of affairs' (2.011). These sections can be read as ascribing to objects the role of generating the realm of possible states of affairs (logical space) from the actually obtaining states of affairs (the facts) in which they figure. On this reading, actually obtaining states of affairs are presented as the fundamental reality. These have 'common characteristic marks' that have built into them non-actual but possible recombinations. This is how '[t]he totality of existing states of affairs also determines which states of affairs do not exist' (2.05).

Three of the essays collected here are mainly concerned with aspects of this family of issues.

In Chapter 4, Hans Sluga traces in Wittgenstein's wartime notebooks the sources of his conviction that there are absolutely simple objects and logically proper names referring to them. He argues that this conviction is the result of three observations: that we can always imagine smaller and smaller parts of our visual field, that we can always break extended physical objects down into smaller bits and that we can always analyse our sentences into constituent terms. However, Sluga contends, these observations fail to establish the existence of absolute simples, and Wittgenstein's conviction is ultimately grounded only in the apparent self-evidence of certain philosophical claims, which Wittgenstein unambiguously rejects as a legitimate source of support. The demise of the doctrine of simples in Wittgenstein's later thought, Sluga concludes, can be ultimately trace back to the inadequacy of these sources of support.

In Chapter 5, I argue against the attribution to Wittgenstein of an argument for simple objects based on the supposedly unacceptable consequences of referents that exist only contingently. I contend that the passages in which Wittgenstein is usually taken to advance this argument (2.0211–2.0212) should not be read in this way. I present an alternative reading of these passages according to which Wittgenstein's claim that the world has to have substance is the claim that there have to be facts as to how the constituents of actually obtaining states of affairs can be recombined to form non-actual but possible states of affairs. Objects constitute the substance of the world because, according to the 2.01s, these possibilities of combination are built into them.

The main concern of Cora Diamond's essay (Chapter 6) is to argue that, just as the *Tractatus* makes room for a contrast between confused philosophical uses of 'object' and unconfused ordinary uses that go over to quantifier

and variable, so it makes room for a contrast between confused philosophical uses of 'proposition' and unconfused ordinary uses that go over to the variable that gives the general form of propositions. Her argument for this conclusion has a direct bearing on the interpretation of the thought that all propositions can be analysed as truth functions of elementary propositions, as it rests on a liberal reading of Wittgenstein's claim (5.54) that propositions occur in other propositions only as bases of truth operations. On her reading, Wittgenstein accepts the possibility of propositions written as the result of non-truth-functional operations on other propositions, so long as they can *also* be written as truth-functions of elementary propositions. Diamond uses this idea to provide, not only an account of unconfused ordinary uses of 'proposition', but also an explanation of Wittgenstein's claim that 'A believes p' is of the form "p" says p', bringing her chapter to bear on the range of issues mentioned in the preceding section.

3. Method

Throughout his career, Wittgenstein was concerned with the question of what method one should adopt for doing philosophy. The Tractatus contains several pronouncements on the issue (mainly the 4.003s, the 4.11s and 6.53), and the question is made urgent by the fact that the doctrines of the Tractatus appear to leave no room for meaningful philosophical discourse. One strategy for relieving this tension invokes Wittgenstein's distinction between saying and showing, arguing that according to the Tractatus, the philosophical truths that cannot be said can nevertheless be shown. However, this approach is now widely regarded as unacceptable.8 This reinstates the need to explain how the Tractatus can be coherently read as making a valuable intellectual contribution. A prominent approach nowadays is to describe the goal of the book as therapeutic: reading the book should enable us to overcome the urge to ask the questions that could only be answered with the kind of discourse that the Tractatus renders nonsensical. On this account, there is a remarkable degree of continuity between the methods of the early and the late Wittgenstein.

⁸ This is due, in large measure, to the advocates of resolute readings of the *Tractatus*. See, e.g., Conant (1991); Diamond (1989).

Three chapters in this collection are mainly concerned with questions relating to Wittgenstein's philosophical method.

Michael Kremer's main goal in Chapter 7 is to understand the nature of the lesson that Wittgenstein claims to have learnt from Russell when he says that his merit is 'to have shown that the apparent logical form of the proposition need not be its real form' (4.0031). On Kremer's account, what Wittgenstein learnt from Russell is a technique for curing philosophical confusion—showing that the confusion arises from using sentences as if they had multiple logical forms simultaneously, and hence as having no fixed logical form. Kremer claims three advantages for this reading over its rivals. First, it explains why the merit should be Russell's specifically, and not also Frege's, even though the latter had also highlighted the gap between apparent and real logical form. Second, it enables us to connect Russell's merit with the nonsensicality of philosophical propositions, as required by the location of the passage in the numerical hierarchy of the Tractatus. And third, it explains how the lesson that Wittgenstein learnt from Russell can be a contribution to the critique of language, as suggested by the first sentence of 4.0031.

In Chapter 8, Marie McGinn aims to interpret Wittgenstein's attack, in his later work, on the tendency to sublime the logic of our language that he finds in Russell and his own earlier philosophy. McGinn argues that this tendency should be taken to include, not only our craving for generality, but also the temptation to picture meaning as a remarkable act of mind. She then discusses the strategies employed by the later Wittgenstein to undermine both aspects of this tendency. The methodological approach that results from these techniques, McGinn argues, can be characterized as a distinctive kind of naturalism that Wittgenstein embraces in his later work.

Brian McGuinness, in Chapter 9, discusses the significance of the style of Wittgenstein's writing and the methods employed in his work, both in his early and late period. He argues that Wittgenstein's style is dictated by his desire to engage in direct discussion with the reader. In order for his writings to have the intended therapeutic effect, the confusion that they mean to dispel must first be recreated. This, McGuinness contends, makes it impossible to codify the method in a doctrine or theory, as advocates of resolute readings of the Tractatus have recently tried to do.

This collection originates in a conference that I organized in London in 2007 in honour of Hidé Ishiguro, with generous support from the Aristotelian Society, the Mind Association, the British Academy, the Great Britain Sasakawa Foundation and the Daiwa Anglo-Japanese Foundation. Ishiguro's work has had an enormous influence on early Wittgenstein scholarship, and her ideas inform, explicitly or implicitly, much of the work collected here. The volume is dedicated to her.

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Russell, Wittgenstein, and Synthesis in Thought

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Summary

Wittgenstein held that Russell's multiple relation theory of judgment fails to explain an atomic judgment's representation of entities as combined. He demonstrated this failure as follows. Under the multiple relation theory, an atomic judgment is a complex whose relating relation is *judgment*, the universal, and whose terms include the entities the judgment represents as combined. Taking such a complex we may arrive through the substitution of constituents at a complex whose relating relation is again judgment but whose terms do not include entities which are logically suited for combination. This second judgment complex will not represent any of its terms as combined, for entities that are logically uncombinable are unrepresentable as combined. Russell's theory does not, however, explain how the original judgment differs from the complex arrived at by the substitution of constituents such that the former but not the latter represents certain of its terms as combined.

1. Complexes, Substitutability, and Judgment

1.1

The multiple relation theory of judgment sits within the context of Russell's general theory of complexes. Let us begin with a brief discussion of this general theory, as held in and around 1913, before turning our attention to judgment.

'A complex', Russell writes, is 'anything which has constituents' (Russell 1984: 79). Such constituents are said variously to figure, occur, appear, or enter in the complex which they constitute. Further, Russell talks of modes of occurring (figuring, etc.) in complexes. A constituent of a complex does not merely occur in the complex: it occurs there in a particular way. So far this remains somewhat abstract; Russell goes on, however, to provide some examples of modes of appearance. Most centrally, Russell discusses the modes of appearance found within members of a particular family of complexes—the family, that is, of atomic complexes. A Russellian atomic complex may have any number of constituents. Such a complex of n + 1 constituents consists of n entities appearing as self-standing units and a single entity appearing in such a way as to go between and relate together the n self-standers. The appearance as self-standing unit Russell calls appearance as term; to go between and relate together n entities appearing as term is to appear as n-relating relation.1

The idea of a mode of appearance in complexes is of central importance to Russell's metaphysics. Indeed, Russell types his entities by reference to such modes. A term, for instance, is defined as an entity which can appear in a complex as term. An *n-ary relation* is an entity which can appear as n-relating relation. A unary relation Russell calls a predicate, relations of all orders are called universals, and terms which are not universals are called particulars. So, for example, we find:

An entity which can occur as 'precedes' occurs in 'A precedes B' will be called a relation. (Russell 1984: 80)

A particular is defined as an entity which can only enter into complexes as the subject of a predicate or as one of the terms of a relation, never itself as a predicate or relation. (Russell 1984: 55-6)

The idea here is quite general: an entity's 'logical type' is a matter of the ways in which it can and cannot appear within complexes.

This idea provokes an obvious question. To say that an entity e can appear in complexes in mode m is to say that a complex is possible in which e appears in m. Trivially, then, there is no complex possible in which Socrates is related

^{1 &#}x27;An atomic complex is one [which] . . . can be analyzed into certain terms related by a single relation' (Russell 1984: 176). More, '[t]he way in which a relating relation occurs in an atomic complex is quite different from the way in which its terms occur' (Russell 1984: 90). For an account in Russell of these different modes of appearance, see, e.g., Russell (1998: 74).

to Plato by something that is not a dual relation—by Aristotle, say. Such an 'impossible complex' would 'go against' the nature of Aristotle as a particular. But is it the case that so long as the elements of a complex are not there playing roles that 'go against' their type, the complex will be possible? A dual relation is an entity such that there are two terms it can relate, but are we further to take it that a dual relation is capable of relating any two terms? A ready response to this question begins with the thought that so long as the types in view are defined in terms only of modes of complex appearance (as they indeed are), and not in terms, say, of specific entities or ranges of entities, then the only thing that 'goes against' an entity's type will be its appearing in a mode, which is given as impossible for that type. If, on the other hand, a mode is given as possible for its type, an entity's appearing in that mode will 'be in line with' its type no matter what other entities are in play in the complex. Next, we may take it in the context of Russell's theorizing that an entity has a 'fully determinate type'—a type, that is, such that for any mode, the mode will either 'go against' or 'be in line with' it. (The type 'term' is not a fully determinate type: some terms can appear as dual relating relation, others cannot.) This is a straightforward assumption to make: it is very hard to see what Russell might be doing here if he were to hold that only certain abilities and inabilities to appear in complexes in a certain mode go to characterize types of the species he has in view. Finally—and here is the key step—we can note that 'being in line with' and 'going against' (determinate) entity types make in themselves for a sense of possibility and impossibility: they make for possibility/impossibility so far as the entity types are concerned. If a and b are terms and r is a dual relation then so far as the types of the three entities are concerned it is possible for r to relate a and b.

The weight of this perspective on complex possibility may be appreciated by emphasizing that the types under discussion here are theoretically basic for Russell. An entity's ability to figure in a certain way in complexes is not explicable by reference to some further, more primitive feature of that entity. Possibility so far as such entity types are concerned is thus possibility so far as basic natures of entities are concerned. Above, we called these basic natures logical; such possibility, such 'being in line with' and 'going against' basic natures, can correspondingly be called logical possibility. Adopting this terminology, then, it will be logically possible for being next to to relate Socrates and Plato, because being next to is a dual relation and Socrates and Plato are terms. Similarly, so long as mortality is a term—which it is for Russell—then it will be

logically possible for Socrates to be next to *mortality*.² What is logically *impossible* is for Socrates to be in-between Plato—that is, for there to be an atomic complex in which Socrates and Plato are related by *being in-between*—for *being in-between* is not a dual relation. Similarly, it is logically impossible for Socrates and Plato to combine as subject and predicate respectively: Plato is a particular and so not a predicate.

It will be useful for us to recast this thought. Along with the idea of entities appearing in complexes in a variety of modes, Russell talks also of a constituent's *position* within a complex, of the *substitution* of entities within complexes, and of a complex's *form*:

A complex has a property which we may call its 'form', and the constituents must have what we call determinate 'position' in this form. (Russell 1984: 81)

[T]wo complexes have the same form if the one becomes the other when the constituents of the other are successively substituted for the constituents of the one. This might be thought to constitute a definition of 'having the same form', but in fact it does not; for it is necessary that the substituted term should be in the same position in the new complex as the old term occupied in the old complex, and the sameness of position thus involved cannot be explained without the notion of form. (Russell 1984: 113)

A complex has a form—a structure, as Russell sometimes calls it (Russell 1984: 114)—within which its constituents occupy various positions. With this idea goes an idea of the substitution of entities. We may substitute a constituent of a complex for another entity to obtain a new complex differing from the old in that the position occupied in the old complex by the entity substituted out is occupied in the new complex by the entity substituted in. These ideas connect relatively straightforwardly for Russell to the notion discussed above of an entity's appearing in a complex in a certain mode, for forms are identified with—or at least put into immediate correspondence to—ways in which entities appear together in certain modes in complexes. There is, for example, such a thing as 'the form of

² Of course, one might want to work with a second species of possibility under which it is impossible for Socrates to be next to *mortality*. The point emphasized here is simply that the structure of Russell's theorizing is such that there is a key sense of possibility in which Socrates *can* be next to *mortality*. The complex in which Socrates is related to *mortality* by *being next to* is a complex in which each constituent appears in a manner in keeping with its basic, logical nature.

all subject-predicate complexes' (Russell 1984: 114), and again as 'the form of dual complexes' (Russell 1984: 115). There is, this is to say, a subject-predicate form shared by all complexes in which one entity appears as term and a second as unary relating relation. This form has two positions: the subject position and the predicate position. The subject position is a term position, a position such that an entity occupying it appears in the complex as term; the predicate position is a unary relating relation position, a position such that an entity occupying it appears in the complex as unary relating relation.

This expanded terminology provides for a recasting of the above thought that, under an obvious notion of logical possibility, a complex in which the constituents' modes of appearance are 'in line with' their basic natures as complex constituents is a logically possible complex. In terms now of substitution this point may be made as the following principle (S) of substitutability:

(S) If there is a logically possible complex A in which entity e1 appears in a mode m (e.g. as term, as dual relating relation) and a logically possible complex B in which a second entity e2 appears in that same mode m, then there is a logically possible complex A' which is the result of substituting e2 in for e1 in any position in which it occurs in A in mode m.

Someone who resists the thought as originally cast commits to the contradiction of entities whose basic natures as complex constituents both suit them and do not suit them to play certain roles together in a complex. Alternatively, now, it may be remarked that if a complex position is, say, a term position—if it is a position such that something occupying it appears in the complex as term—then an entity whose fundamental nature as a possible complex constituent suits it to appear in complexes as term is an entity whose fundamental nature suits it to appear in that position. Principle (S) is implicit in Russell's basic thinking about the nature of complexes and their constituents.

1.2

Let's move on from the general theory of complexes to Russell's theory of judgment. The first thing to note in making this move is Russell's identification of complexes with facts.³ The atomic complex 'Socrates' love for

³ See, e.g., Russell (1907: 45). Due perhaps to the influence of Wittgenstein, Russell is by 1913 not wholly confident about the identification, writing that 'there is certainly a one-one correspondence of complexes and facts, and for our present purposes we shall assume that they are identical' (Russell 1984: 80).

Plato'—a complex in which Socrates and Plato appear as term and *love* appears as relating relation—is the atomic fact that Socrates loves Plato. It is, this is to say, that whose existence provides the truth condition of a judgment that Socrates loves Plato.⁴ So Russell wrote in 1910:

If A loves B, there is such a complex object as 'A's love for B', and vice versa; thus the existence of this complex object gives the condition for the truth of the judgment 'A loves B'. (Russell 1966: 157)

As for the judgment itself, Russell famously proposes that S's judgment that A loves B is an atomic complex whose terms are S, A, *love*, and B, and whose relating relation is *judgment*, the universal. More generally, Russell makes the following claim:

(J) A judgment by S whose truth condition is the existence of an atomic complex c is itself an atomic complex whose terms include S and the constituents of c and whose relating relation is *judgment*.

Russell calls atomic complexes of more than two terms *multiple relation* complexes. Russell's claim (J) is the heart of what is therefore known as his *multiple relation theory of judgment.*⁵

(J) is motivated and developed by Russell in a number of interesting ways. For the most part, however, we shall not explore such matters. Our focus will rather be on Wittgenstein's criticism of the multiple relation theory. The most straightforward formulations of this criticism are found in the 1913 *Notes on Logic* where Wittgenstein writes:

Every right theory of judgment must make it impossible for me to judge that this table penholders the book. Russell's theory does not satisfy this requirement. (Wittgenstein 1979: 103)

And again:

A proper theory of judgment must make it impossible to judge nonsense. (Wittgenstein 1979: 95)

What Wittgenstein has in mind here by a nonsense judgment, I shall suggest, is a judgment whose truth condition involves an entity's appearing (or not

⁴ See Russell (1984: 130).

⁵ See, e.g., Russell (1966: 155).

appearing) in a manner which goes against its basic logical nature. In Russell's terms, and scoped to his atomic judgments, a nonsense judgment is a judgment whose truth condition is the existence of a 'logically impossible atomic complex'—an atomic complex, that is, in which an entity figures in a way which 'goes against' its basic nature as discussed above. An example of such a complex would be that in which a table is related to a book not by the dual relation *bigger than* but by a penholder, or that in which Desdemona is related to Cassio not by the relation *love* but by the particular Iago. Wittgenstein complains that Russell's theory is consistent with the existence of such nonsense judgments.

1.3

It is not immediately clear either how Russell's theory is to be consistent with the possibility of nonsense judgment or why Wittgenstein found this consistency objectionable. There is, however, something we can note right away, which appears to be very much in the area of Wittgenstein's complaint. According to (J), Othello's judgment that Desdemona loves Cassio is a complex one of whose constituents is *love*, the universal. Indeed, *love* figures in the complex that is Othello's judgment as term. Given (S), then, *love* may here be substituted for any other term, including the particular lago: there is a logically possible complex which is the result of substituting lago for *love* in Othello's judgment. Similarly, there is a logically possible complex which is the result of substituting a penholder for *bigger than* in a judgment that a certain table is bigger than a certain book. Leaving to one side for now the surrounding content of Wittgenstein's objection, the proposal I want to make in this section is that Wittgenstein brought the principle (S) of substitutability to bear in this way on Russell's thesis (J).

Before pursuing this idea, we should note that Russell's commitment to principle (S) is not something he explicitly recognizes at the time of Wittgenstein's criticism. Indeed, despite writing in 1903 that 'it is characteristic of the terms of a proposition [a complex] that any one of them may be replaced by any other entity [term] without our ceasing to have a proposition' (Russell 1992b: 45), Russell spends considerable effort in his 1913 work *Theory of Knowledge* theorizing about complexes in ways which contravene precisely this (narrowed) version of (S).⁶ My expanded

⁶ See, for example, the discussion of 'heterogeneous complexes' in part II chapter II of Russell (1984).

suggestion will thus be as follows. In *Theory of Knowledge*—the work under way when Wittgenstein first made his criticism—Russell was under the impression that he had the right to disallow certain substitutions that (S) would allow. More particularly he was under the impression that he could disallow certain unwelcome looking substitutions in his multiple relation judgment complexes. In his objection to the multiple relation theory, however, Wittgenstein pressed upon Russell his commitment to (S). The criticism was thus doubly painful for Russell: not only was his theory of judgment undermined, so too was much of his more general theorizing at the time about complexes. The principal support for this suggestion, beside the consideration of section 1.1 above that it is incoherent of Russell to deny (S), derives from Russell's reaction to Wittgenstein's attack.

It is notable that from the time of the impact of Wittgenstein's criticism Russell drops all theorizing at odds with the principle of substitutability.⁷ This is, however, only suggestive. What provides the strongest evidence for my proposal is Russell's discussion of judgment in his 1918 lectures *The Philosophy of Logical Atomism*. He writes there:

'Othello believes that Desdemona loves Cassio.' There you have a false belief. You have this odd state of affairs that the verb 'loves' occurs in that proposition and seems to occur as relating Desdemona to Cassio whereas in fact it does not do so, but yet it does occur as a verb, it does occur in the sort of way that a verb should do. I mean that when A believes that B loves C, you have to have a verb in the place where 'loves' occurs. You cannot put a substantive in its place. Therefore it is clear that the subordinate verb (i.e., the verb other than believing) is functioning as a verb, and seems to be relating two terms, but as a matter of fact does not when the judgment happens to be false. (Russell 1968: 225)

In Othello's belief that Desdemona loves Cassio, *love* occurs not as term but in a manner proper to verbs (relations). This is given in the fact that 'you have to have a verb in the place where "loves" occurs. You cannot put a substantive in its place.' What can be replaced in a complex only by a relation, Russell asserts in 1918, must be appearing there in a manner proper to relations only. *Love* can be replaced in A's belief that B loves C only by a relation and so it must appear there not as term but in a manner proper to relations.

⁷ Consider especially here Russell (1949; 1968; 1984, the first six chapters, as prepared in 1914–15 for publication).

So whilst Russell engaged in theorizing opposed to (S) in 1913, by 1918 the principle is deployed at the forefront of his reasoning. And with this new endorsement of (S) comes a repudiation of the multiple relation theory of judgment:

[A] main thing one wants to notice in this matter [of judgment is] ... the impossibility of putting the subordinate verb on a level with its terms as an object term in the belief. That is a point in which I think that the theory of judgment which I set forth once in print some years ago was a little unduly simple, because I did then treat the object verb as if one could put it as just an object like the terms, as if one could put 'loves' on a level with Desdemona and Cassio as a term for the relation 'believe'. (Russell 1968: 226)

Unwilling to accept the result of substituting Iago for *love* in Othello's belief that Desdemona loves Cassio, Russell rejects his earlier theory in which *love* appears in Othello's belief as term on a level with Desdemona and Cassio. His multiple relation thesis (J) is thrown out.

The question now opens up for Russell: how then does *love* occur in Othello's belief? It must occur *as a relation*—in a manner proper to those entities capable of appearing as relating relations—but the only manner proper to relations in the theory of atomic complexes is that of relating relation. And *love* certainly cannot occur there in that manner, as actually relating Desdemona to Cassio, for, as Russell notes, the possibility of false judgment would then be foreclosed. What we must have here, therefore, is a way of appearing in complexes that is neither as term nor as relating relation. We must have here, that is to say, complexes of a form quite different from that of any atomic complex:

You cannot get in space any occurrence which is logically of the same form as belief. When I say 'logically of the same form' I mean that one can be obtained from the other by replacing the constituents of the one by the new terms. If I say 'Desdemona loves Cassio' that is of the same form as 'A is to the right of B'. Those are of the same form, and I say that nothing that occurs in space is of the same form as belief. I have got on here to a new sort of thing, a new beast for our zoo, not another member of our former species but a new species. The discovery of this fact is due to Mr. Wittgenstein. (Russell 1968: 225–6)

It can be shown* that a judgment, and generally all thought whose expressions involves *propositions*, must be a fact of a different logical form from any of the series:

subject-predicate facts, dual relations, triple relations, etc. In this way, a difficult and interesting problem of pure logic arises, namely the problem of enlarging the inventory of logical forms so as to include those forms appropriate to the facts of epistemology.

* As I have come to know through unpublished work of my friend Mr. Ludwig Wittgenstein. (Russell 1984: 46)8

This task of enlarging the inventory of logical forms, of giving a theory of the relevant types of non-atomic complexes, was not, however, pursued.

1.4

Let us take stock. We have suggested that in his attack on Russell's theory of judgment, Wittgenstein pressed upon Russell his obligation to the principle (S) of substitutability. As a consequence of this obligation, Wittgenstein pointed out, there is the possibility for Russell of substituting Iago for love in Othello's belief. We have also given an explanation of Russell's devastation at Wittgenstein's attack. This was due both to Russell's recognition of his commitment to the principle of substitutability, and so of the invalidity of a good part of his thinking at the time about complexes, and also to the loss of his multiple relation theory. Russell takes it that you have to have a dual relation in the place where love occurs in 'A believes B loves C', and so, given the principle of substitutability, that his proposal (J) must be rejected. It remains to be answered, however, why you must have a dual relation where love occurs in 'A believes B loves C'. Why not keep the multiple relation theory and accept the logical possibility of substituting Iago for love in Othello's jealous judgment? To provide an answer to this question will be the major task of the remainder of this chapter. Our focus in this task will be more on Wittgenstein than on Russell: rather than investigating why Russell set himself against the possibility of substituting Iago for love in Othello's judgment, we shall be concerned principally to see what role was played by that possibility in Wittgenstein's rejection of Russell's theory.9

⁸ This citation is from *Theory of Knowledge* as it was prepared for publication in October 1914. (The editor of Theory of Knowledge noted that it was unlikely that this passage was written before October 1913 (see Russell 1984: xxxvii).)

⁹ Nicholas Griffin has given an answer to the question of what Wittgenstein found objectionable with Russell's theory which can at best, I think, be plausible only as (part of) an answer to the question of why Russell was devastated at Wittgenstein's attack. Griffin links Wittgenstein's criticism to Russell's theory of types, writing that '[w]hat Wittgenstein was able to show was that Russell's multiple-relation theory

2. Synthesis in thought

2.1

Russell developed his basic multiple relation judgment idea in a number of ways. The most striking of these is made in the 1913 manuscript *Theory of Knowledge*:

Thus, if we call the subject S, and the relating relation (of which 'understanding' is presupposed by all the others) U, and the objects x, R, γ (taking the case of a proposition asserting a dual relation for the sake of illustration), and γ the form of dual complexes, the total complex which occurs when the subject has the relation U to the objects in question may be symbolised by $U(S, x, R, \gamma, \gamma)$. (Russell 1984: 115)

Under earlier versions of the multiple relation theory the terms of a multiple relation judgment were exhausted by the judgment's subject and the constituents of the complex whose existence is its truth condition. In 1913, however, Russell includes also the form of this latter complex. The aim of this section is to explain why he does this. Russell holds, for quite general reasons, that forms are terms, but why should multiple relation judgment complexes contain forms appearing as term?

Russell accounts for his new proposal as follows:

Suppose we wish to understand 'A and B are similar'. It is essential that our thought should, as is said, 'unite' or 'synthesize' the two terms and the relation; but we cannot actually 'unite' them, since either A and B are similar, in which case they are already united, or they are dissimilar, in which case no amount of thinking can force them to become united. The process of 'uniting' which we can effect in thought is the process of bringing them into relation with the general form of dual complexes. (Russell 1984: 116)

The introduction of form terms to multiple relation judgments is to account for an atomic thought's 'uniting' or 'synthesizing' the constituents of the

of judgment was inconsistent with his theory of types, the lynchpin of the logic of *Principia*' (Russell 1992a: 461). As Michael Potter points out, however, the intricate and technical nature of the demonstration makes its attribution to Wittgenstein implausible (Potter 2009: 129–30). Wittgenstein was neither competent with the formal details of Russell's theory of types nor much concerned at any point in his career to offer complex technical arguments of the kind Griffin suggests. To these remarks I would add that Wittgenstein's criticism of Russell's theory is repeated in the *Tractatus* (Wittgenstein 1961: 5.5422), and the suggestion that Wittgenstein was concerned as late as 1918 to argue against Russell on the basis of certain technical details of his theory of types is wholly implausible.

complex whose existence is its truth condition. Russell believes there to be a certain synthesis in thought, and his account of this phenomenon is that a thought's terms include a form.

Looking to understand this, a first thing to note is that a complex's form is talked of in *Theory of Knowledge* as the 'mode of combination' of its constituents (see, e.g., Russell 1984: 98). This makes good sense. For a complex to be a subject-predicate complex—for it to be of the subject-predicate form—is for it to have two constituents, one of which appears as term and the other as predicate (as unary relating relation), and considered together, these ways of appearing are a way of combining. Taking on board this perspective on forms, then, we can see Russell's suggestion to be that combining things in thought is a matter of having them together in thought with a mode of combination. But of what notion of 'combining in thought' is this intended as an account?

First, we should be clear to separate the issue here of unity in a thought from the issue of the unity of a thought. A thought is a complex, and it is an ongoing general concern in Russell how a complex is to be distinguished from the mere collection of its constituents. But Russell is not worried in this passage about how the complex that is Othello's judgment that Desdemona loves Cassio is to be distinguished from the collection of its constituents—from the collection, that is, of Othello, judgment, Desdemona, love, and Cassio. The unity in question regarding S's judgment is rather a unity within the judgment, and it is a unity not of all five but of just three of its constituents: Desdemona, love, and Cassio. 10 Next, we can be clear that what is to be explained is precisely a synthesis of these three items—in particular Russell is not concerned with any aspect, separable from the synthesis itself, of the judging subject's (Othello's) understanding of the synthesis.¹¹ Narrowing in with these preliminaries in hand, Russell's clearest claim about the phenomenon he would explain is that it is not an actual synthesis. If Desdemona, love, and Cassio are not actually united into the complex 'Desdemona loving Cassio' then they do not become so by

¹⁰ Russell's more or less unwavering account from 1903 to 1918 of the unity of an atomic complex is that it is the product of the complex's relating relation playing a binding role within the complex. To occur as relating relation is to go between and bind together the entities appearing as term. In the case of a judgment complex, then, the complex is unified in virtue of the copulative appearance of the universal *judgment*.

¹¹ Cf. the discussion in note 17 below.

Othello's believing that Desdemona loves Cassio. Othello believes that Desdemona loves Cassio but in fact Desdemona does not love Cassio. A further handle may be gained by asking what kind of mental act would *not* involve a synthesis of the relevant kind. Here the suggestion might be of acts of thinking of objects one by one. ¹² But still, what are these contrast cases contrasting with? A few sentences further on in his manuscript Russell writes:

[W]hen we are concerned with a proposition which may be false, and where, therefore, the actual complex is not given, we have only, as it were, the 'idea' or 'suggestion' of the terms being united in such a complex; and this, evidently, requires that the general form of the merely supposed complex should be given. (Russell 1984: 116)

In thought, entities are not actually united and so an actual complex is not given; what we have rather is the 'idea' or 'suggestion' of entities being united. In a belief that A and B are similar we have the suggestion or idea that A, B, and *similarity* are combined into the complex 'A similar to B'.

Taking the above points together, Russell's notion of 'synthesis in thought' may, I suggest, be clarified as concerning *representation*. Consider a belief that A is red. For Russell this belief contains the entities A and *redness*. More than this, though, there is in the belief the suggestion of these two entities being united into the complex 'A is red'. This is not to say, of course, that within the belief A and *redness* are *actually* united together into the complex 'A is red'—that would rule out the possibility of falsity. What it means, rather, is that within the belief A and *redness* are *represented* as united together into the complex 'A is red'. So Peter Hylton writes:

The judgement must represent the objects as combined in the same way that they are actually combined in the corresponding fact (if there is one). If the judgment does this simply by bringing it about that the objects are so combined, then this no longer appears to be uniting them in thought only. . . . How can we give a meaning to 'unite in thought' which keeps this notion clearly distinct from uniting in reality?

¹² Stuart Candlish imagines a 'mind leap[ing] from A to love to B, or group[ing] them in that order' and claims that 'this is not a judgment that A loves B' (Candlish 1996: 117). David Pears agrees, adding further that such mental leapings are distinguished from judgments precisely by the absence from the former of the synthesis with which Russell is concerned in *Theory of Knowledge*. There is, Pears writes, a 'general difference between combining the constituents [of a complex] in thought and thinking of them one by one' (Pears 1989: 174).

Russell's answer is that the judgement represents the constituents as combined in the right way not by so combining them but by including 'the way they are to be combined' as a further entity, the logical form, which the judging mind combines with the others. (Hylton 1990: 345–6)

The suggestion is as follows. A judgment that certain entities are combined in a certain way—a judgment whose truth condition is that certain entities combine in a certain way—is a judgment that represents those entities as so combined. (So much is, I take it, pleonastic: to have the truth condition that certain entities combine in a certain way is to represent those entities as so combined.) This representation/having a truth condition is something Russell is concerned in Theory of Knowledge to explain. More, given that he is committed to an atomic judgment that p being a multiple relation complex whose existence is sufficient for its being judged that p—he is committed, that is, to its being internal to a multiple relation judgment complex that it represents what it does—Russell is concerned to explain such a judgment's representation of entities as combined by reference to an internal feature of the complex. The account Russell offers in 1913 of such representation is that a judgment with the truth condition that certain entities combine in a certain mode contains amongst its terms not only those entities but also that mode of combination.

2.2

We might worry here that simply including the way things are represented as standing amongst the constituents of a judgment does not obviously do the required work—it is not obvious how this explains the fact that the judgment represents things as standing together in the included way. A thought's synthesizing certain things might seem rather different from its containing both those things and a mode of synthesis. Leaving such concerns to one side, however, let us turn instead to the context of Russell's 1913 proposal.

Russell's discussion in *Theory of Knowledge* of the inclusion of form terms within multiple relation judgments begins with a repudiation of an earlier version of the multiple relation theory as given in his 1912 *The Problems of Philosophy*:

What is the proof that we must understand the 'form' before we can understand the proposition? I formerly held that the objects alone sufficed, and that the 'sense' of

the relation of understanding would put them in the right order; this, however, no longer seems to me to be the case. Suppose we wish to understand 'A and B are similar'. It is essential that our thought should, as is said, 'unite' or 'synthesize' the two terms and the relation... (Russell 1984: 116)

In The Problems of Philosophy Russell had written the following:

It will be observed that the relation of judgment has what is called a 'sense' or 'direction'. We may say, metaphorically, that it puts its objects in a certain *order*. (Russell 1998: 73)

When an act of believing occurs, there is a complex, in which 'believing' is the uniting relation, and subject and objects are arranged in a certain order by the 'sense' of the relation of believing.... When the belief is *true*, there is another complex unity, in which the relation which was one of the objects of the belief relates the other objects. Thus, e.g., if Othello believes *truly* that Desdemona loves Cassio, then there is a complex unity 'Desdemona's love for Cassio', which is composed exclusively of the *objects* of the belief in the same order as they had in the belief... (Russell 1998: 74)

Russell's proposal in 1912 is that the judgment's relating relation makes it the case that the judgment represents certain of its terms as combined in a certain way. A judgment's relating relation puts its terms into a certain semantic order. This proposal was never elaborated: at no point did Russell say *how* the relating relation effects the semantic ordering. Rather than asking what Russell might have said here, however, I should like to examine the chronology of events immediately surrounding Russell's expression on 24 or 25 May 1913 of his change of mind.

On 20 May 1913, whilst Russell was in the midst of writing part I of *Theory of Knowledge*, Wittgenstein came to Russell 'with a refutation of the theory of judgment which I [Russell] used to hold'.¹³ Three or four days later, on 23 or 24 May, Russell moved on in his work to part II chapter I of *Theory of Knowledge*, that part in which judgment is first broached.¹⁴ There Russell remarks the need to explain a synthesis in judgment, suggests that his earlier theory of *The Problems of Philosophy* failed to meet this need, and proposes instead that judgments contain forms as one of their terms. The

¹³ Letter from Russell to Morrell #782, postmarked 21 May 1913, cited in Russell (1984: xxvii).

¹⁴ See for this chronology the editor's introduction to *Theory of Knowledge* (Russell 1984: xxvii).

suggestion is thus available that Russell's rejection in *Theory of Knowledge* of the 1912 version of his theory of judgment was prompted by Wittgenstein. Indeed, this suggestion would seem most probably true. Wittgenstein's refutation of 20 May would, we may suppose, be of the theory of judgment of *The Problems of Philosophy*: there was no version intervening between that version and the as yet uncomposed version of *Theory of Knowledge*, and Wittgenstein would most likely address himself to Russell's most recent account. If this is granted, however, then to deny that the two refutations are the same, or at least closely related, would mean supposing a considerable coincidence of timing between Wittgenstein giving his refutation to Russell and Russell three or four days later penning for the first time a quite different objection to the same theory. Russell nowhere gives or discusses any objection to his theory of *The Problems of Philosophy* other than that written so shortly after the encounter with Wittgenstein.

Moving the chronology on, Wittgenstein visits Russell again on 26 May:

I [Russell] showed him a crucial part of what I had been writing. He said it was all wrong, not realizing the difficulties—that he had tried my view and knew it wouldn't work. I couldn't understand his objection—in fact he was very inarticulate—but I feel in my bones that he must be right, and that he has seen something I have missed. (Russell 1992a: 459)

Following this meeting, in the week leading to 18 June 1913, Wittgenstein writes to Russell saying 'I can now express my objection to your theory of judgment exactly' (Wittgenstein 1995: 29). Wittgenstein then makes for the first time his complaint that Russell's theory does not rule out the possibility of nonsense judgment.¹⁵

Considering these later events, we may infer from Wittgenstein's letter that the 'crucial part' of his manuscript shown by Russell to Wittgenstein on 26 May included Russell's *Theory of Knowledge* version of the multiple

I can now express my objection to you theory of judgment exactly: I believe it is obvious that, from the prop 'A judges that (say) a is in the Rel R to b', if correctly analysed, the prop ' $aRb \lor \sim aRb$ ' must follow directly without the use of any other premiss. This condition is not fulfilled by your theory. (Wittgenstein 1995: 29)

Deciphering, note that Russell at the time used the proposition 'p or not p' to mean "p" is significant' (see Russell and Whitehead 1935: 171). Wittgenstein is thus complaining that it does not follow from Russell's theory of the nature of a judgment that what is judged makes sense. The theory does not rule out nonsense judgment.

¹⁵ What Wittgenstein writes at this point is:

relation theory of judgment, written only a day or two before that meeting. This inference fits happily with the suggestion made just above that Russell's 1913 rejection of the theory of judgment of The Problems of Philosophy derived at least partially from Wittgenstein: Russell is showing Wittgenstein how he proposes to deal with the difficulty Wittgenstein had raised six days earlier for his 1912 version of the multiple relation theory. Indeed, a nicely cohering picture of the whole episode may now be drawn. On 20 May, Wittgenstein puts to Russell that there is a synthesis in thought which is not successfully accounted for by his 1912 theory. Russell agrees and on arriving on 23 or 24 May in his work at judgment rejects that theory and pens a new version in which a form is added to a judgment's terms in order to effect the required synthesis. On 26 May, Russell shows Wittgenstein this new idea. Wittgenstein objects inarticulately, telling Russell that the suggestion 'wouldn't work', that adding a form to the terms of a multiple relation judgment would not make for the judgment's synthesis. Later, Wittgenstein finds himself able to make his objection more clearly, and complains of Russell's theory that it does not rule out nonsense judgment.

Plausible as it may be, this history of the engagement between 20 May and 18 June is of course somewhat speculative: it is supported in part by only circumstantial evidence. Its purpose, however, is not to carry any great weight of exegesis. What is hoped for rather is a clue as to where and how we might look to connect together what may have so far appeared rather disparate lines of concern with Russell's theory, namely the concern with a synthesis in thought and Wittgenstein's nonsense judgment criticism. And what is suggested by the history is that the two are tightly linked. Our story finds Wittgenstein presenting his nonsense judgment objection to Russell precisely as the objection that Russell's *Theory of Knowledge* version of his theory of judgment still does not account for the synthesis in thought. I want to suggest that this is indeed what Wittgenstein is doing. Wittgenstein's claim that Russell's multiple relation theory is consistent with the existence of nonsense judgment was intended as a demonstration that that theory, even in its 1913 version, does not account for thought's synthesis.

2.3

To see how this demonstration works, let's first consider (again) that the species of nonsense in view is that of a judgment whose truth condition

involves an entity playing a combinatorial role to which it is logically unsuited. It is a premise of Wittgenstein's criticism of Russell that such judgment is impossible. There is no such thing as judging that Socrates and Plato are related by what is not a dual relation—by Aristotle, say, or by being in-between. There is no such thing as representing Desdemona and Cassio as combined as subject and predicate respectively. Representability entails logical possibility. This is a significant premise which we do not, unfortunately, have space here to explore. As a minimal contextualizing gesture, however, consider that the equivalent for Frege of representing Desdemona and Cassio as combined as subject and predicate would be to represent Cassio as a concept mapping Desdemona to the True. To do this one would need something like a 'concept expression referring to the object Cassio'. Any such suggestion would, of course, be anathema, and even contradictory, to Frege. Similarly, the suggestion is anathema to Wittgenstein that an entity might be represented as combining in a manner to which it is logically unsuited.

Next, let's turn to the possibility of unwelcome substitutions in Russellian multiple relation judgments. Consider a judgment by Aristotle that Socrates is human. The truth condition of this judgment, for Russell, is that Socrates and humanity are combined as subject and predicate: the judgment represents those two entities as so combined. Now under the multiple relation theory Aristotle's judgment is a multiple relation complex whose relating relation is judgment and whose terms are Aristotle, Socrates, and humanity (and perhaps also the dual complex form). In appearing as term, however, humanity is substitutable in this multiple relation complex for any other term. (The possibility of such substitutions is, recall, something to which Russell's basic ideas about complexes and their constituents commit him—even if this is something Russell does not recognize at times in his 1913 writings. Part of Russell's devastation at Wittgenstein's attack stemmed from his coming to see that his commitment to principle (S) renders much of his theorizing at the time about complexes invalid.)¹⁶ Let's then consider

¹⁶ The suggestion this chapter makes for Wittgenstein's criticism has been reacted to more than once with the claim that if this is Wittgenstein's point it falls flat because Russell held in 1913 that a universal occurring as term cannot (always) be substituted for a particular. The purpose of much of sections 1.1 and 1.3 above was to suggest that whilst Russell may indeed have held this, his basic theorizing about the nature of complexes and their constituents commits him to the contrary. In a similar vein, it has been objected that this chapter does not address the details of the final version of the multiple relation theory of judgment Russell lays out later on in *Theory of Knowledge*, a version of the theory in which Russell can perhaps be read as at least trying to meet Wittgenstein's concerns as he then understood them. These

substituting *humanity* in Aristotle's multiple relation judgment for the term Plato. What can we say about the complex that results from this substitution? Well one thing we can say about it is that it is not a nonsense judgment representing Socrates and Plato as combined as subject and predicate: there is no such possible judgment. But this raises a challenge for Russell. How does Aristotle's judgment that Socrates is human differ from the result of substituting *humanity* there for Plato, such that the former represents Socrates and *humanity* as combined as subject and predicate where the latter does not represent Socrates and Plato as so combined? How, that is to say, does Russell rule out the nonsense judgment that Socrates and Plato are combined as subject and predicate?

This challenge is urgent, for if it is not met then Russell's attempted explanations of a judgment's representational synthesis will be seen to fail. If it is not explained what the difference is between the two judgment complexes, such that the one but not the other represents certain of its terms as combined—if nothing in Russell's theory rules out the nonsense judgment that Socrates and Plato are combined as subject and predicate then the representation by Aristotle's judgment that Socrates is human will not have been explained. Transparently, however, nothing we have seen of Russell's theorizing meets this challenge. The 1912 idea that the sense of the judgment relating relation will put the terms into the relevant semantic order is by itself inadequate: nothing Russell says makes for an explanation of how it is that when Plato is substituted for humanity in Aristotle's judgment the sense of the relating relation does not order Socrates and Plato just as before it ordered Socrates and humanity. And the 1913 proposal that a judgment's representation of entities as combined is explained by its containing a form term is seen straightaway not to work: if Aristotle's judgment contains a form term then so too will the result of substituting humanity in that judgment for Plato. As developed, then, the multiple

details depend, however, upon an implicit rejection of principle (S), and so cannot be seen as an adequate response to Wittgenstein. I mentioned above that from the time of the impact of Wittgenstein's criticism Russell abandoned all work inconsistent with (S). Whilst the criticism certainly had impact of a kind the first time it was made (Russell felt straightaway that Wittgenstein, though inarticulate, must have seen something he had missed), it was probably not until the two met again face to face on 18 June that Russell came to see (S) as the basis of Wittgenstein's point. On 19 June, Russell wrote to Morrell that 'yesterday' he had felt 'ready for suicide'. 'All that has gone wrong with me lately comes from Wittgenstein's attack on my work—I have only just realised this' (Russell to Morrell, #811 pmk. 20 June 1913, cited in Russell 1984: xix). Work on *Theory of Knowledge* ceased at this point.

relation theory of judgment can be seen not to explain the representation of an atomic judgment. Russell's theory of judgment fails to be a theory of judging that something is the case. This, I suggest, is the intended force of Wittgenstein's criticism.^{17,18}

David Pears has presented an interpretation of Wittgenstein's critique which compares interestingly to that given in this chapter. Pears starts from what has been a central concern of this section: that of 'the general difference between combining the constituents [of a complex] in thought and thinking of them one by one' (Pears 1989: 174). Instead, however, of tackling questions as to the nature of this difference and of how it is to be given theoretical account, Pears raises the question of how the subject knows that the way entities are combined in his thought is a real possibility for those things. He writes:

[I]f we turn now to the second thing that Russell's theory was designed to explain, the subject's knowledge that aRb really is a possibility, we have independent evidence that an objection to this part of the theory was among the criticisms made by Wittgenstein at that meeting [of 26 May 1913]. (Pears 1989: 178–9)

At this time, Pears says, Wittgenstein made the point that:

if acquaintance with the constituents of a proposition is going to explain how the subject knows that he has put them together in a way that makes sense, then acquaintance must be intensional. For example, he must be acquainted with a and b as objects of the right kind to combine with R to produce aRb. (Pears 1989: 179)

It has, however, been argued earlier in Pears' paper that 'acquaintance is an extensional relation not involving any knowledge of truths about its object' (Pears 1989: 172). Thus Russell's theory fails to explain how the subject 'knows that what he thinks is a real possibility' (Pears 1989: 180). Pears continues:

When Wittgenstein's point is put like this, it is a point against Russell's 1910 theory of judgment [in which the only acquaintances needed by someone who understands the proposition aRb are with a, R and b], and of course it does make an impact on that theory. However, it is clear that Wittgenstein actually made the point against the 1913 theory, which required acquaintance with the form of dyadic relations as well as acquaintance with the three constituents. It follows that Wittgenstein must have argued that, even when Russell had brought in acquaintance with the form, he had not made any progress toward a solution of the problem. For it remained unexplained how the subject knows that the constituents can be combined within this form. In short, if the form is treated as an object of acquaintance, it recreates the problem it was designed to solve. (Pears 1989: 179)

Thus Pears, like me, finds Wittgenstein arguing that the introduction by Russell of form terms into his multiple relation judgments (and the addition therewith of a requirement on a judger of acquaintance with forms) fails to serve the purpose for which it was intended. Where I read that purpose to be a synthesis in thought, however, Pears does not find Russell to be after an account of this synthesis and reads the inclusion of form terms as intended rather to explain the subject's knowledge that the (given) synthesis is indeed a genuine possibility.

Russell certainly considered acquaintance by the subject with the objects of a judgment (including, in 1913, a form) a precondition on the judgment's existence. This issues from his general position that '[a]ll cognitive relations—attention, sensation, memory, imagination, believing, disbelieving etc.—presuppose acquaintance' (Russell 1984: 5). It is not obvious, however, that in the case of a propositional attitude these prior acquaintances were supposed to explain, or constitute, knowledge by the subject that the cognition is genuinely propositional (and not 'nonsensical'). Indeed, it is not obvious what Russell's interest should be in such knowledge: might a subject not make a judgment in its absence? What does seem clear, by contrast, is that the primary purpose of Russell's 1913 inclusion of form terms in judgment was to explain not a knowledge by the subject that the thought's synthesis is a genuine possibility but rather the synthesis itself:

The process of 'uniting' which we can effect in thought is the process of bringing them [A, B and similarity] into relation with the general form of dual complexes. (Russell 1984: 116)

It is frustrating that Pears fails to explore this key remark.

¹⁸ A recent commentator whose interpretation comes close to mine is Graham Stevens, who writes:

If the subordinate relation is to be treated as a term on a par with the elements it is intended to relate, then there will be no logical difference between the relation and its referents and relata. In other words, in place of a judgment-complex

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of the form $J\{S, x, R, y\}$ we are in fact left with an analysis which, at best, will be of the form $J\{S, x, y, z\}$. A theory of judgment which fails to explain the difference between a judgment like 'Othello believes that Desdemona loves Cassio' and one like 'Othello believes that Love desdemonas Cassio' is simply one which fails to account for the difference between judgements and non-judgements; in other words, it simply fails to provide an explanation of judgement at all. (Stevens 2005: 96)

And:

Wittgenstein's target... was the failure of the [multiple relation] theory to account for the division of propositional content into parts which reflect and preserve its unity and hence debar nonsensical pseudo-judgments such as 'this table penholders the book'. (Stevens 2005: 105)

Stevens' principal interest in the episode of Wittgenstein's criticism is, however, to explain its impact on Russell; he is much less occupied with Wittgenstein's half of the transaction. The Wittgensteinian sounding notion of representing entities as combined—of representing that something is the case—is not brought into clear view. Further, he locates Russell's commitment to the possibility of unwelcome substitutions in judgment complexes as the consequence not of his basic ideas of complexes and their constituents, but rather of a thesis that the constituents of a judgment must stand on an equal ontological footing if orders of propositions are to be generated at the epistemological rather than the ontological level (see, e.g., Stevens 2005: 103).

Christopher Pincock argues against Stevens as follows:

Stevens's idea is that when a relation is not a relating relation for a complex, Russell must treat it as on a par with terms that are not relations. As the multiple-relation theory requires invoking relations that are not relating relations, the theory cannot make the required distinctions. For example, if Russell allows U(o, d, L, c), then he must also allow U(o, L, d, c), that is, Othello understands that love desdemonas Cassio.

Now, on the interpretation of the theory that I have developed, the complexes that Stevens says Russell must countenance are ruled out as logically impossible. No commitments that Russell defends in *Theory of Knowledge* require what Stevens requires. For example, Russell's theory of complexes denies that if there is a complex where A is a part of a, then there is a possible complex in which a is a part of A. So even things are heterogeneous in some complexes. When it comes to the network of relations involved in the full analysis of an understanding complex, the same restrictions will be in place. We can block Stevens's objection, then, by emphasizing Russell's theory of complexes and the restrictions that it imposes. (Pincock 2008: 121–2)

By 'Russell's theory of complexes', however, Pincock is referring not to Russell's ideas of complexes as discussed in section 1.1 above, but rather to higher level discussions of complexes which are given up from the time of—and, I suggest, as a result of—the impact of Wittgenstein's criticism. To repeat, Russell does not, given his basic ideas of complexes and their constituents, have the right to theorize as he does in opposition to principle (S). (It may be, of course, that given his understanding of Russell's commitment to unwelcome substitutions Stevens cannot so easily defend himself against Pincock.)

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Early Wittgenstein on Judgement

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1. Introduction

Between 'Notes on Logic' and the *Tractatus*, Wittgenstein changed his mind about the analysis of judgement sentences. In 'Notes on Logic' his view was that:

The proposition 'a judges p' consists of the proper name a, the proposition p with its 2 poles, and a being related to both of these poles in a certain way. This is obviously not a relation in the ordinary sense. (Wittgenstein 1913: 95)

In the *Tractatus* the account of judgement comes at 5.542:

It is clear, however, that 'A believes p', 'A has the thought p', and 'A says p' are of the form "p" says p': and this does not involve a correlation of a fact with an object, but rather the correlation of facts by means of the correlation of their objects. $(5.542)^1$

Any doubt that these are different views is removed at 5.5421, where Wittgenstein draws the conclusion that 'there is no such thing as the soul—the subject, etc.—as it is conceived in the superficial psychology of the present day' (5.5421). The subject in 'superficial psychology' is an object capable of entering into relations with propositions. According to 5.542, the subject of 'A judges that p' is a complex fact and not any kind of object at all. This is a clear departure from the account in 'Notes on Logic', which makes essential use of a judging subject.

¹ All quotations from the *Tractatus* are from the Pears and McGuinness translation (Wittgenstein 1961), unless otherwise noted.

My aim in this chapter is to understand these accounts of judgement and Wittgenstein's reasons for changing his mind. Neither account can be understood without a clear view of the interlocking problems he faced in trying to give an analysis of judgement and belief sentences. These problems presented Wittgenstein with a dilemma, one half of which is well understood and widely acknowledged. Sentences like 'A believes p' and 'A judges p' are not truth-functions of p. Even worse, the most immediate way of analysing 'A judges p' treats judgement as a binary relation between a subject and something named by p, which violates several fundamental commitments of both 'Notes on Logic' and the *Tractatus*. For Wittgenstein, propositions—interpreted sentences—are facts that are true or false. They are not names for anything and they are not objects that can bear relations. The proposition p is neither a name for something that can enter into the judgement relation nor is it itself an object that can be judged.

A way out of these difficulties was available to Wittgenstein at the time of 'Notes on Logic', namely, Russell's multiple relation theory of judgement. On Russell's multiple relation theory, judgement is a many-place relation between the subject and the objects, properties and relations denoted by the constituents of p. Russell's theory changed over time, but the core idea was that the logical form of a judgement sentence like 'A judges that n is F' is 'Judges(A, n, F)'. This means that the sentence 'n is F' does not occur at all in the analysis of 'A judges that n is F', and so does not occur as a name or an argument to a predicate. On Russell's view, 'A judges p' is not a function of p at all, much less a non-truth-functional one. Russell's multiple relation theory of judgement looks like it should have been a welcome addition to the developing system of the Tractatus.

But, of course, Wittgenstein vigorously rejected Russell's multiple relation theory. He gives his reason at 5.5422:

The correct explanation of the form of the proposition, 'A makes the judgement p', must show that it is impossible for a judgment to be a piece of nonsense. (Russell's theory does not satisfy this requirement.) (5.5422)

The exact nature of the problem that Wittgenstein raises here is controversial. Most commentators have interpreted this and several related remarks to be a point about type restrictions on judgement.² The constituents of the

² Wittgenstein's objection first appears in a letter to Russell from June 1913 (Wittgenstein 1995: 29). It also shows up in several places in 'Notes on Logic' (Wittgenstein 1913: 95 and 103).

content of a judgement have to be combinable into a possible fact, and for that reason must fall under the right types. It is possible to judge that an object has a property, or that two objects bear a two-place relation, and so on, but it does not make sense to judge two objects, or one object and a two-place relation. Such combinations are nonsense. A widespread reading of Wittgenstein's objection to Russell takes the basic point to be that nothing in the multiple relation theory rules out the possibility of judging one of these nonsensical combinations.

I have argued elsewhere that this reading is mistaken (Hanks 2007). The problem that Wittgenstein raised for the multiple relation theory has nothing directly to do with type restrictions on judgement. The real point of Wittgenstein's objection is that what is judged must be capable of being true or false, and a disunified collection of objects, properties, and relations, even ones that satisfy type restrictions, lacks that capacity. To judge that Desdemona loves Othello is always also to judge that it is true that Desdemona loves Othello. However we analyse this judgement, therefore, it must turn out that the answer to the question 'What is judged?' is the sort of thing that is true or false. The answer given by Russell's multiple relation theory, in any of its forms, does not satisfy this requirement. Desdemona, the relation of loving, and Othello, considered as a collection of several, separate entities, lacks the capacity for truth and falsity.

At any rate, that is what I take to be the point of Wittgenstein's objection. The issue is controversial, and I do not want to revisit it here. What should be *un*controversial is the lesson that Wittgenstein draws from his objection:

When we say that A judges that, etc., then we have to mention a whole proposition which A judges. It will not do either to mention only its constituents, or its constituents and form, but not in the proper order. This shows that a proposition itself must occur in the statement to the effect that it is judged. (Wittgenstein 1913: 94)

At a pinch we are always inclined to explanations of logical functions of propositions which aim at introducing into the function either only the constituents of these propositions, or only their form, etc. etc.; and we overlook that ordinary language would not contain the whole propositions if it did not need them. (Wittgenstein 1913: 101)

In other words, the sentence p must occur, whole and intact, in the analysis of 'A judges p'. This not only rules out Russell's multiple relation theory,

but *any* analysis of 'A judges p' on which p is split up into its separate parts.³ This is the main lesson that Wittgenstein drew from his objection to Russell's multiple relation theory, and it is a constraint he placed on his theories of judgement in both 'Notes on Logic' and the *Tractatus*.

We have, then, the second horn of the dilemma: p has to appear as a complete sentence in the analysis of 'A judges p'. Taken together, the two horns present a seemingly impossible situation. The proposition p cannot occur in 'A judges p' as an argument to a predicate and it does not occur as an input to a truth-function (first horn). Yet p must somehow occur as a complete proposition in 'A judges p'. It cannot be broken up into its constituents in the manner of Russell's multiple relation theory of judgement (second horn). Understanding Wittgenstein's accounts of judgement is largely a matter of seeing how he finds his way through the horns of this dilemma.

In a letter to Russell of 22 June 1913, Wittgenstein apologized for the effect of his objection to the multiple relation theory:

I am very sorry to hear that my objection to your theory of judgment paralyses you. I think it can only be removed by a correct theory of propositions. (Wittgenstein 1995: 33)

Wittgenstein thought that a correct account of judgement would only come on the heels of a correct account of propositions. The key to understanding Wittgenstein's accounts of judgement, therefore, is to see how they were informed by his views on elementary propositions, in particular, his views on predication, bipolarity, and sense. My aim in this chapter is to spell this out in detail. I will show how the evolution of his views on judgement closely paralleled the evolution of his views on elementary sentences from 'Notes on Logic' to the *Tractatus*. A broader aim of the chapter is to shed some light on the picture theory in the *Tractatus* by showing how it

³ Commentaries on 5.542 tend to miss this point. In his introduction to the *Tractatus*, Russell wrote that 'the real point [of 5.542] is that in believing, desiring, etc., what is logically fundamental is the relation of a proposition, *considered as a fact*, to the fact which makes it true or false, and that this relation of two facts is reducible to a relation of their constituents' (Wittgenstein 1961: xxii). The idea that this relation of facts is reducible to a relation of their constituents suggests that, in the final analysis, only the constituents of p occur in 'A judges p', not p itself. See also (Ramsey 1923: 10). As Sullivan explains, on Ramsey's reading of 5.542 'the apparent occurrence of "p" on the "right-hand side" of '"p" says that p' (and therefore of "A judges p") will, on a right account, simply disappear' (Sullivan 2005: 60). Fogelin misses the point rather blatantly when he writes that Wittgenstein 'certainly holds that the proposition p does not occur at all in the proposition "A believes p"' (Fogelin 1987: 76–7).

developed out of his earlier views in 'Notes on Logic'. We will see that Wittgenstein's ideas about how elementary sentences represent the world changed radically over this period.⁴

2. Bipolarity and sense in 'Notes on Logic'

In 'Notes on Logic', Wittgenstein is very clear in his rejection of the idea that sentences are names, a view he found in Frege and Russell.

Frege said 'propositions are names'; Russell said 'propositions correspond to complexes'. Both are false; and especially false is the statement 'propositions are names of complexes'. (Wittgenstein 1913: 97)

The idea that sentences are names for truth-values is a familiar Fregean doctrine. The view he attributes to Russell can be found in Principles of Mathematics (Russell 1903). There Russell assumed a close structural parallelism between sentences and the non-linguistic propositions they express.⁵ For every meaningful component of a sentence there is a corresponding component in the non-linguistic proposition expressed by the sentence. For example, the non-linguistic proposition expressed by the sentence 'A differs from B' has three parts, A, the relation of difference, and B, corresponding to the linguistic parts 'A', 'differs from', and 'B'. Russell held that the relation of difference joins A and B together in this non-linguistic proposition: 'the difference which occurs in the proposition actually relates A and B' (Russell 1903: 49). Russell's 1903 account therefore identifies nonlinguistic propositions with facts, 'complexes', in which objects bear properties and relations. Sentences 'correspond' to these complexes insofar as each part of a sentence goes proxy for a component of the corresponding complex. This tight correspondence between the parts of sentences and the parts of complexes makes the relation between sentences and complexes

⁴ I disagree with Ricketts, who has argued that 'the Tractarian conception of sentences as pictures is more a natural deepening than a revision of the NL conception of sentences and representation' (Ricketts 1996: 73).

⁵ Hylton characterizes this view of Russell's by saying that 'language becomes, as it were, a transparent medium through which propositions may be perceived' (Hylton 1990: 171). See also Proops (2000: 63). Hylton goes on to suggest that this transparency accounts for Russell's disconcerting tendency to use the term 'proposition' indiscriminately for both sentences and the non-linguistic contents of sentences.

look very name-like. For Russell, a sentence is something like a complex name for a complex.

Wittgenstein unequivocally rejected the idea that sentences function anything like names. One way he drew out the differences was though an analogy with arrows and points.

A proposition is a standard to which facts behave, with names it is otherwise; it is thus bi-polarity and sense comes in; just as one arrow behaves to another arrow by being in the same sense or the opposite, so a fact behaves to a proposition. (Wittgenstein 1913: 95)

Names are points, propositions arrows—they have sense. (Wittgenstein 1913: 101)

An arrow can stand to other arrows in ways that points cannot stand to points. The fact that an arrow points in a direction entails that other arrows can point in the same or opposite direction. (Wittgenstein must have been thinking only of arrows that run parallel to one another.) In this way an arrow presents a standard or norm to which another arrow may or may not conform; one arrow conforms to another just in case it points in the same direction. Nothing like this can be said about points. There is no natural sense in which one point conforms to another point. A point does not present a standard or norm or rule to which another point may or may not conform.

Wittgenstein's idea was that this difference between arrows and points is analogous to the difference between sentences and names. A sentence provides a kind of standard to which a fact may or may not conform. The fact in question is the meaning of the sentence: 'the meaning of the proposition is the fact which actually corresponds to it' (Wittgenstein 1913: 94). This fact can be positive or negative. Consider the sentence 'This rose is red'. The meaning of this sentence, for Wittgenstein, is either the positive fact that the rose is red or the negative fact that the rose is not red. The sentence provides a norm to which this positive or negative fact, whichever one it is, either conforms or does not conform. Wittgenstein calls this norm the 'sense' of the sentence. The positive fact, if it obtains, conforms to the sense of 'This rose is red' and the negative fact, if it obtains, does not. In this respect, the relationship between a sentence and its meaning is analogous to the relationship between one arrow and another arrow. The relationship between a name and its referent is entirely different. The referent of a name may or may not exist, but even if it exists there is no non-artificial sense in which it conforms to the

name. And if the referent does not exist, it is not as though there exists something that fails to conform to the name.

It is important not to press this analogy too hard. Wittgenstein is not saying that a sentence literally points to a fact or that it has a direction in the same way that an arrow has a direction.⁶ A sentence is like an arrow just insofar as it presents a standard or norm with which something else may or may not be in accord. In the case of an arrow the something else is another arrow. In the case of a sentence the something else is the meaning of the sentence, a positive or negative fact.

Another point of analogy is that the kinds of norms contained in sentences and arrows are such that they determine two ways for something to 'behave' with respect to those norms. The direction of an arrow determines two possible ways for another arrow to relate to it: the other arrow points in the same direction or the opposite direction. (Again, only consider arrows that run parallel to one another.) Similarly, a sentence determines two possibilities for its corresponding fact. The sentence determines a possible positive fact and a possible negative fact, and its meaning is whichever of these facts is the case. This 'bipolarity' is something sentences share with arrows.

We can go deeper by asking how a sentence determines its sense. The corresponding question for arrows would be: how does an arrow determine a direction? At least for arrows, the answer seems easy.⁷ There is a head at one end of the arrow, and it points in the direction of its head. How does a sentence determine its sense? Wittgenstein's answer in 'Notes on Logic' comes in his account of predication.

Naming is like pointing. A function is like a line dividing points of a plane into right and left ones. (Wittgenstein 1913: 94)

⁶ Russell makes this mistake in *The Analysis of Mind*. There he says that 'when to-day is Tuesday, your belief that it is Tuesday points *towards* the fact, whereas when to-day is not Tuesday your belief points *away from* the fact' (Russell 1921: 272), and credits this idea to Wittgenstein in a footnote. Similarly, according to Potter, the point of the arrow analogy is that 'the sense of a proposition is akin to the direction of an arrow: p and p point to the same fact, i.e. they have the same meaning; but they point to it in opposite directions, i.e. they have opposite senses' (Potter 2009: 155). I find it hard to make sense of the idea that p and p point to the same fact but in opposite directions.

 $^{^7}$ Actually, it's not so easy. Wittgenstein returns to arrows in *Philosophical Investigations*: 'How does it come about that this arrow \rightarrow *points*? Doesn't it seem to carry in it something besides itself?—"No, not the dead line on paper: only the psychical thing, the meaning, can do that."—That is both true and false. The arrow points only in the application that a living being makes of it'. (Wittgenstein 1953: 112, §454). An arrow determines a direction only once we use it to point in that direction.

The form of a proposition has meaning in the following way. Consider a symbol 'xRy'. To symbols of this form correspond couples of things whose names are respectively 'x' and 'y'. The things xy stand to one another in all sorts of relations, amongst others some stand in the relation R, and some not; just as I single out a particular thing by a particular name I single out all behaviours of the points x and y with respect to the relation R. I say that if an x stands in the relation R to a y the sign 'xRy' is to be called true to the fact and otherwise false. This is a definition of sense. (Wittgenstein 1913: 95)

The form of a proposition is like a straight line, which divides all points of a plane into right and left. (Wittgenstein 1913: 102)

These are claims about the semantic function of predicates. By 'function', in the first remark, Wittgenstein must have meant what for him would have been a propositional function, something that takes names as inputs and gives propositions, that is, sentences, as values. Functions, in this sense, are linguistic predicates with their argument places. 8 He is fairly explicit about this when he uses locutions like 'the function "xRy" (Wittgenstein 1913: 95). Similarly, by 'form of a proposition' Wittgenstein meant a linguistic predicate. The predicate in 'aRb' is not another name alongside 'a' and 'b', it is rather the form in which 'a' and 'b' are combined in the sentence. This is closely connected to Wittgenstein's idea that 'in "aRb" it is not the complex that symbolizes but the fact that the symbol "a" stands in a certain relation to the symbol "b" (Wittgenstein 1913: 96). I will return to this point in section 4.

The main idea in these remarks about functions and forms is that predicates divide objects into categories. A one-place predicate like 'x is red' divides objects into two categories, the red things and the non-red things. Every object falls into one or the other of these categories, and none falls into both. A two-place predicate like 'xRy' divides pairs of objects into two categories, those pairs that bear the relation R and those that do not, and every pair falls into one or the other of these categories. Equivalently, we might say that 'xRy' divides facts into two categories. In one category are positive facts in which two objects bear the relation R and in the other are

⁸ This notion of a propositional function is of course different from Russell's. This should be unsurprising, given the different ways Wittgenstein and Russell used the term 'proposition'. Wittgenstein's propositions are linguistic entities, Russell's are not, and so it should be unsurprising that for Wittgenstein propositional functions are also linguistic entities.

negative facts in which two objects do not bear R. This generalizes to n-place predicates and n-tuples of objects. This is what Wittgenstein is getting at when he says that 'a function is like a line dividing points of a plane into right and left ones' (Wittgenstein 1913: 94), and 'the form of a proposition is like a straight line, which divides all points of a plane into right and left' (Wittgenstein 1913: 102).

The semantic role of a name, on the other hand, is to identify an object: the name 'a' identifies the object a, the name 'b' identifies the object b. Combining the name 'a' with the predicate 'x is red' determines two possibilities, since a is in one or the other of the two categories determined by the predicate. Similarly, combining 'a' and 'b' with 'xRy' determines two possibilities, one in which the pair consisting of a and b is in the R group and the other in which this pair is in the non-R group. Since every predicate determines an exhaustive and exclusive division of objects, every sentence will determine exactly two possibilities for how the objects named by its names can be located relative to the division determined by its predicate. This is why every sentence is necessarily bipolar.

However, just fixing these two poles, the two possibilities for how objects can be sorted relative to the categories given by a predicate, is not enough for a sentence to determine its sense. For a sense to be determined a sentence has to go one step further and say which of these two possibilities actually obtains. A sentence has to say in which category its objects are located. The sentence 'a is red' says that the object a is in the red group; this is the sense of 'a is red'. This sentence is 'called true to the fact' (Wittgenstein 1913: 95) if the positive fact that a is red obtains, and false if the negative fact that a is not red obtains. In this way a sentence provides a standard to which facts behave—by saying how objects are sorted into groups. The facts behave in accordance with this standard just in case objects fall on the side of the division where the sentence says they fall.

This raises a question about how a sentence takes this final step necessary for having a sense. How does a sentence say that its objects fall into one of the categories determined by its predicate? In the sentence 'a is red' the name identifies a and the predicate divides objects into the red and non-red, but how does the sentence say that a is red? The key to understanding

⁹ The negation of this sentence, 'a is not red', has 'opposite sense' (Wittgenstein 1913: 95); it makes the same red/non-red division and identifies the object a, but it sorts a into the non-red group.

Wittgenstein's answer in 'Notes on Logic' is to see that these questions are equivalent to asking: how do truth and falsity come to be associated with the poles of 'a is red'? One of the poles of 'a is red' is the truth pole and the other the falsity pole. The sense of 'a is red' is fixed by the assignment of truth and falsity to its two poles. In 'Notes on Logic', a proposition's having the sense it has is not prior to its having true—false poles. Rather, 'the sense of a proposition is determined by the two poles true and false' (Wittgenstein 1913: 101–2). Therefore, to understand how 'a is red' says that a is red, we need to understand why one of the poles of 'a is red' is the truth pole and the other the falsity pole.

Wittgenstein's idea in 'Notes on Logic' was that a predicate divides objects into groups and associates truth with one group and falsity with the other. This is what he means when he says 'I correlate the facts to the symbol "xRy" by thus dividing them into those of like sense and those of opposite sense' (Wittgenstein 1913: 104). The facts of 'like sense' with 'xRy' are those that would make elementary sentences formed from this predicate true, and facts of 'opposite sense' are those that would make these sentences false. The predicate 'xRy' thus divides facts into two categories, and assigns truth to one category and falsity to the other. This means that predicates have a dual role to play in the determination of sense. Both of these roles are the result of conventions.

The sense of a proposition is determined by the two poles *true* and *false*. The form of a proposition [i.e. a predicate] is like a straight line, which divides all points of a plane into right and left. The line does this automatically, the form of [a] proposition only by convention. (Wittgenstein 1913: 101–2)

Our conventions dictate that the predicate 'x is red' divides objects into the red and non-red, and associates truth with the red group. That is why the positive fact that a is red is the *truth* pole of 'a is red', and hence why 'a is red' says that a is red.

Wittgenstein eventually became dissatisfied with this account of how sense is determined. There is nothing in the *Tractatus* about the form of a proposition being like a straight line, or about predicates dividing objects into groups. Later on I will make a suggestion about why he might have rejected his earlier theory of sense, but first we should see how Wittgenstein applied his ideas in 'Notes on Logic' about bipolarity and sense to give an account of judgement sentences.

3. Judgement in 'Notes on Logic'

The key passage is worth quoting at length, including the accompanying diagram:

When we say 'A believes p', this sounds, it is true, as if here we could substitute a proper name for 'p'; but we can see that here a *sense*, not a meaning, is concerned, if we say 'A believes that "p" is true'; and in order to make the direction of p even more explicit, we might say 'A believes that "p" is true and "not-p" is false'. Here the bi-polarity of p is expressed, and it seems that we shall only be able to express the proposition 'A believes p' correctly by the ab-notation; say by making 'A' have a relation to the poles 'a' and 'b' of a-p-b. The epistemological questions concerning the nature of judgement and belief cannot be solved without a correct apprehension of the form of the proposition.



In 'A believes that a is red' the subordinate sentence 'a is red' is not a name for anything. Nor does 'A believes that a is red' say that a is red. Still, 'a is red' occurs in the belief sentence as a complete sentence with a sense. As Wittgenstein puts it, the sentence 'A believes that a is red' expresses the bipolarity of 'a is red'. What does that mean?

The answer is evident from the 'Notes on Logic' account of bipolarity and sense. The sentence 'a is red' occurs inside 'A believes that a is red' with its usual true—false poles, although the belief sentence itself does not have these true—false poles. When it occurs inside the belief sentence 'a is red' presents the possibility that a is in the red group and the possibility that a is in the non-red group, with truth assigned to the first possibility and falsity to the second. The belief sentence 'A believes that a is red' then determines its own true—false poles as a function of these two possibilities.

The belief sentence does this is by 'making "A" have a relation to the poles "a" and "b" of a-p-b' (Wittgenstein 1913: 106). This needs to be interpreted carefully. In several places, Wittgenstein hedges the claim that judgement and belief are *relations* between a subject and the poles of a sentence.

The proposition 'a judges p' consists of the proper name a, the proposition p with its 2 poles, and a being related to both of these poles in a certain way. This is obviously not a relation in the ordinary sense. (Wittgenstein 1913: 95)

Logical indefinables cannot be predicates or relations, because propositions, owing to sense, cannot have predicates or relations. Nor are 'not' and 'or', like judgment, analogous to predicates or relations, because they do not introduce anything new. (Wittgenstein 1913: 99)

Judgement and belief are not relations in the ordinary sense, although they are analogous to relations.

It would be a mistake to conclude from these remarks that the theory of judgement in 'Notes on Logic' was tentative or half-baked.¹⁰ We can make good sense of the idea that judgement and belief are analogous to relations by applying Wittgenstein's account of predication to the words 'judges' and 'believes'. The words 'judges' and 'believes' are predicates and should be treated like predicates. This means that 'judges' and 'believes' determine bipartite divisions of objects, although these divisions are different from the kinds of divisions drawn by ordinary predicates. The one-place predicate 'x is red' makes a simple division of objects into two groups; a two-place predicate like 'xRy' divides pairs of objects into two groups. The predicates 'judges' and 'believes' do not behave exactly like either of these, although there are affinities in both cases. Like one-place predicates, 'judges' and 'believes' divide objects into two groups. Unlike one-place predicates, however, 'judges' and 'believes' divide objects relative to something else, the poles of a subordinate sentence. This is the sense in which 'judges' and 'believes' are similar to two-place predicates. A two-place predicate can be seen as dividing pairs of objects into categories, or as making divisions of individual objects relative to different fixed arguments. If we fix b as the second argument to 'xRy' then this predicate determines a division in objects relative to b, and will determine different divisions for different fixed arguments. Similarly, 'judges' and 'believes' draw divisions in objects relative to their subordinate sentences, and will divide objects differently for different subordinate sentences. In this way, the subordinate sentences in judgement and belief statements are analogous to the relata of relations, although they are not objects that enter into relations in the ordinary sense.

It might help to consider a one-place predicate formed from a belief sentence, for example 'x believes that a is red'. The subordinate sentence 'a is red' determines the red/non-red division, assigns truth to the red group and falsity to the non-red group, and identifies the object a, thereby determining its true-false poles. The predicate 'believes' then divides objects relative to these poles—a division with respect to a division. One category contains objects who believe that a is in the red group, and the other category consists of those who do not believe this. Plugging a name into 'x believes that a is red' generates a sentence that is true if the referent of the name is in the first of these two categories. The sentence 'A believes that a is red' therefore says that A is in the category of objects who believe that a is in the group of red things, that is, it says that A believes that a is red. The fact that makes 'A believes that a is red' true does not involve A bearing a relation to the poles of 'a is red'—which would be impossible, since true-false poles are not the sorts of things that can bear relations. Rather, the fact that makes 'A believes that a is red' true is that A is in a mental state that puts her in one of two categories that are defined relative to the poles of 'a is red'. Echoing Wittgenstein, this is clearly not a relation between A and the poles of 'a is red' in the ordinary sense.

This solves the dilemma with which we started. When it occurs inside 'A judges p', p has its customary true-false poles and therefore occurs as a complete sentence with a sense. Furthermore, 'A judges p' does not say that A bears a relation to something named by p, although it does do something analogous to that. 'A judges p' says that A falls into one of two categories, where these categories are defined relative to the two poles of p. In 'A judges p', therefore, p does not function as a proper name and judgement is not a relation between a subject and an object, thus avoiding the first horn of the dilemma. At the same time, however, p occurs as a complete, meaningful sentence and is not broken up into its separate components, thus avoiding the second horn.

It is hard not to be impressed by the subtlety of this solution. Within a year, however, Wittgenstein had moved on. The first indication of this shows up as the final remark in 'Notes Dictated to G.E. Moore in Norway', from April 1914. The remark is a clear precursor to 5.542:

The relation of 'I believe p' to 'p' can be compared to the relation of "p" says p' to p: it is just as impossible that I should be a simple as that 'p' should be. (Wittgenstein 1914: 119)

Our next task is to understand Wittgenstein's reasons for leaving behind the account of judgement in 'Notes on Logic' in favour of the view presented here and eventually in the *Tractatus*.

4. Between 'Notes on Logic' and the Tractatus

It is possible to discern two sources of dissatisfaction with the account of judgement sentences in 'Notes on Logic'. The clearer of the two is evident in the remark on belief in the Moore notes. The point of that remark is that the representation of facts requires logical complexity. 11 Something simple and non-composite does not have the capacity for presenting a standard to which the facts behave; a logical simple is more like a point than an arrow. Objects, which are logically simple, therefore cannot stand to facts in the way that sentences stand to facts. The account of judgement in 'Notes on Logic' fails to respect this point. According to that account, sentences about judgement and belief sort objects relative to the poles of their subordinate sentences. 'A judges that a is red' sorts A into the group of objects who judge that a is red. The problem is that judging that a is red requires doing what the sentence 'a is red' does—representing the possible fact that a is red and the possible fact that a is not red and affirming the former and not the latter. A logically simple object is not capable of this. Judgement and belief sentences therefore must not be sorting objects into groups relative to their subordinate sentences. They have to be sorting sentences, or entities with the logical complexity of sentences, relative to their subordinate sentences. That is why Wittgenstein says that 'the relation of "I believe p" to "p" can be compared to the relation of "p" says p' to p' (Wittgenstein 1914: 119). The subject term in sentences about judgement and belief must signify something with the logical complexity of a sentence.

The other source of dissatisfaction with the 'Notes on Logic' account of judgement sentences must have been a larger dissatisfaction with the

¹¹ See Anscombe (1959: 88) and Kenny (1973: 100-1).

account of bipolarity and sense upon which it is based. As I noted earlier, the idea that predicates divide objects into categories is absent in the *Tractatus*. The Moore notes and the 1914–16 'Notebooks' are also devoid of this idea. The 'definition of sense' in 'Notes on Logic' does not survive into later work. It is hard to know with any certainty what Wittgenstein found wrong with his earlier view, but one possibility is a tension between his definition of sense and the idea that sentences are facts. In 'Notes on Logic' Wittgenstein had already arrived at a conception of sentences as facts that would survive into the *Tractatus*:

In 'aRb' it is not the complex that symbolizes but the fact that the symbol 'a' stands in a certain relation to the symbol 'b'. Thus facts are symbolised by facts, or more correctly: that a certain thing is the case in the symbol says that a certain thing is the case in the world. (Wittgenstein 1913: 96)

The main point here is that a sentence should not be seen as a complex object that symbolizes a fact, but rather as a fact that symbolizes a fact. But it is also possible to extract from this a point about predicates. We encountered this point earlier in connection with Wittgenstein's use of the term 'form of a proposition'. Wittgenstein describes the sentence 'aRb' as a fact in which the name 'a' is related to the name 'b', not as the fact in which 'a', 'b', and 'R' are related to one another. This sets the predicate in a sentence apart from its names. The predicate is not a constituent of the sentence/fact in the same way that 'a' and 'b' are constituents of it. The predicate's role in the sentence is to link together the names 'a' and 'b'. It serves as the relation holding these names together in a fact, or the form in which they occur in this fact. The fact that is the sentence 'aRb' is the fact in which 'a' and 'b' flank the predicate 'R' on the left and right. The names 'a' and 'b' are 'R'-related in 'aRb' by occurring on either side of 'R'.

Now, compare this with what we saw earlier in the 'Notes on Logic' definition of sense:

The form of a proposition has meaning in the following way. Consider a symbol 'xRy'. To symbols of this form correspond couples of things whose names are respectively 'x' and 'y'. The things xy stand to one another in all sorts of relations, amongst others some stand in the relation R, and some not; just as I single out a

¹² See Anscombe (1959: 89) and Ricketts (1996: 71-3).

particular thing by a particular name I single out all behaviours of the points x and y with respect to the relation R. (Wittgenstein 1913: 95)

The role of the predicate 'xRy' is to 'single out' one of the many different ways in which two objects can be related to one another. And a predicate does this singling out in the same way that a name singles out an object; I use 'xRy' to single out the relation R 'just as I single out a particular thing by a particular name'. This sounds dangerously close to the view that a predicate functions as a name for a relation. This name-like view of predicates comes out even more starkly in a later restatement of the definition of sense:

I correlate the facts to the symbol 'xRy' by thus dividing them into those of like sense and those of opposite sense. To this correlation corresponds the correlation of name and meaning. Both are psychological. (Wittgenstein 1913: 104)

Psychological facts, that is, conventions, correlate a predicate with a division of facts, just as a name is correlated with its referent. This is, in effect, to treat predicates as names of divisions of facts, or as names of relations, which is in obvious tension with the idea that a predicate *is* a relation that holds names together in sentences.

The conception of sentences as facts survives into the *Tractatus* as a central part of the picture theory of meaning, whereas the idea that a predicate 'is like a straight line, which divides all points of a plane into right and left' (Wittgenstein 1913: 102) does not. Sometime after completing 'Notes on Logic', and probably prior to dictating his notes to Moore in Norway, Wittgenstein abandoned his early theory of bipolarity and sense. This of course meant that Wittgenstein had to revise his account of judgement sentences. The theory of judgement sentences in 'Notes on Logic' was an application of his views about bipolarity and sense to sentences about judgement and belief. Abandoning those views meant that it no longer made sense to say that in 'A judges that p' the subject A is related to the two poles of p. Making sense of that required thinking of predicates as determining divisions in objects and sentences as saying how objects are located with respect to these divisions. If this account of predication and sense is abandoned then the accompanying account of judgement will have to go with it. In the light of this, it is not surprising that the theory of judgement in the Tractatus has to be viewed through the lens of the Tractarian idea that a sentence shows its sense.

5. Pictures, bipolarity, and sense in the Tractatus

The idea that a predicate is the relation binding names together in a sentence brings with it a very different conception of how sense is determined. Instead of sorting objects into categories, a sentence says something by *showing* how objects are related.

A proposition shows its sense.

A proposition *shows* how things stand if it is true. And it *says that* they do so stand. (4.022)

A sentence shows something about objects through the way in which the names for those objects are related in the sentence. By writing 'a' and 'b' on either side of 'R' we construct a picture that shows a bearing the relation R to b. The sentence 'aRb' does not say that a bears R to b by locating the pair $\langle a,b \rangle$ with respect to a division determined by R. Rather, the sentence 'aRb' says that aRb by showing a bearing R to b.

An attractive feature of the 'Notes on Logic' account was the light it shed on the bipolarity of sentences. The theory of predication in 'Notes on Logic' makes it very clear how a sentence determines exactly two possibilities for how the facts can behave. The predicate in a sentence fixes an exhaustive and exclusive division of objects (individuals, pairs, triples, etc.) and the names in the sentence identify the required number of objects. This immediately determines two possibilities, since the objects named in the sentence can fall into one or the other of the two categories fixed by the predicate. These two possibilities are the two poles of the sentence.

The clarity of this explanation of bipolarity carried over to the analysis of judgement sentences. A key idea in the 'Notes on Logic' theory of judgement is that 'A judges p' expresses the bipolarity of p, without itself saying that p. The sentence p has its usual true—false poles when it occurs inside 'A judges p', and the true—false poles for the entire belief sentence are determined relative to the true—false poles of p.

Wittgenstein never lost sight of the fact that the truth of 'A judges p' is independent of the truth of p. As in 'Notes on Logic', in the *Tractatus* 'A judges p' expresses the bipolarity of p but does not say that p. The trouble comes in understanding what this means after the shift to the picture theory. What does it mean for 'A judges p' to express the bipolarity of p on the picture theory? Exactly how does p occur as a complete sentence with a

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sense in 'A judges p', even though 'A judges p' does not say that p? To answer this we have to answer a prior question about how the picture theory accounts for bipolarity. How does a picture determine exactly two possible ways for the facts to be?

It is striking how little Wittgenstein has to say about the bipolarity of elementary sentences in the *Tractatus*. Even by Tractarian standards, his account of bipolarity is telegraphic.

A picture presents a situation in logical space, the existence and non-existence of states of affairs. (2.11)

Propositions represent the existence and non-existence of states of affairs. (4.1)13

One half of this is fairly easy to understand, the half that says that a picture presents the existence of a state of affairs. A picture presents the existence of a state of affairs by depicting it. A picture of two people fighting shows the two people fighting and thereby presents the state of affairs in which the two people are fighting.

It is harder to see how a picture presents the *non*-existence of a state of affairs. How does a picture of two people fighting present the negative fact in which those two people are not fighting? How does a picture show how things are *not*? Wittgenstein struggled with this problem in the 1914–16 'Notebooks':

A picture can present relations that do not exist! How is that possible? (Wittgenstein 1914–16: 8)

Could we say: In ' $\sim \phi(x)$ ' ' $\phi(x)$ ' images how things are *not*?

13 It is tempting to read 4.023 as an explanation of bipolarity:

A proposition must restrict reality to two alternatives: yes or no. In order to do that, it must describe reality completely. (4.023)

This is the Pears and McGuinness translation, and it is misleading. The Ogden translation is better:

The proposition determines reality to this extent, that one only needs to say 'Yes' or 'No' to it to make it agree with reality.

Reality must therefore be completely described by the proposition. (Wittgenstein 1922: 4.023)

Ogden's translation makes it clear that the second of the two remarks expresses a consequence of the first remark, instead of providing the ground or reason for the first remark, as the Pears and McGuinness translation suggests. In his letters to Ogden Wittgenstein approved of the way Ogden translated the second remark in 4.023, although he confessed, regarding the first remark, that 'this prop[osition] I cannot translate' (Wittgenstein 1973: 27).

Even in a picture we could represent a negative fact by representing what is *not* the case.

If, however, we admit these methods of representation, then what is really characteristic of the relation of *representing*? (Wittgenstein 1914–16: 21)

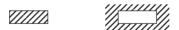
This last set of remarks was written on 30 October 1914. Two days later he seems to have found a solution.

That two people are not fighting can be represented by representing them as not fighting and also by representing them as fighting and saying that the picture shews how things are *not*. (Wittgenstein 1914–16: 23)

You can hold up a picture of two people fighting in order to show how things are or to show how things are not. 14 The picture is exactly the same in either case. The difference is just a matter of how you use the picture, not anything in the picture's content or what the picture shows. The way the elements of the picture are arranged and the way they are correlated with objects remains the same whether you use it to say how things are or to say how things are not. The picture must therefore show both how things are and how things are not. It depicts a positive fact and a negative fact at the same time.

In a later remark in the 'Notebooks', which recurs in the *Tractatus* at 4.462 without the illustration, Wittgenstein provides a useful analogy for how a picture shows both positive and negative states of affairs.

The proposition, the picture, the model are—in the negative sense—like a solid body restricting the freedom of movement of others; in the positive sense, like the space bounded by solid substance, in which there is room for a body.



This image is very clear and must lead to the solution. (Wittgenstein 1914–16: 30)

The illustration is a two-dimensional version of the point about solid bodies. A rectangle marks out two regions of space, the space inside its lines and the space outside, and thereby presents both of these spaces at the same time. Both spaces are marked out by the same four lines arranged in a rectangle.

This is analogous to the way in which a picture presents both a positive and a negative state of affairs—although, again, the analogy must not be

¹⁴ I am indebted here to Anscombe (1959: 69-71).

taken too literally. A picture presents two possibilities at the same time, a way for objects to be related and a way for them not to be related. Both possibilities are shown by the way the elements of the picture are arranged in the picture, plus the fact that these elements are correlated with objects in the world. It is not that there are two different ways of representing positive and negative facts. If our theory of representation had that consequence, then we would not have discovered 'what is really characteristic of the relation of representing' (Wittgenstein 1914–16: 21)—we would not have discovered the essence of representation. Wittgenstein's confidence in the picture theory was strengthened when he realized that it gives a unified account of how states of affairs are represented. Pictures show how things are in exactly the same way that they show how things are not. That is why pictures, and hence sentences, are necessarily bipolar.

Once again, though, this cannot be the whole story. The picture presents both the existence and non-existence of states of affairs, but it only *says* that the positive state of affairs obtains. An elementary proposition shows how things stand if it is true, and it says that they do so stand (4.022). Bipolarity requires that it also shows how things do *not* stand, but the proposition does not say that things do not so stand. An elementary proposition only says what it shows in the positive sense, not in the negative sense. What accounts for this asymmetry? It is hard to find the answer in the *Tractatus*. We can, of course, *use* the picture to assert that a positive state of affairs exists, for example that two people are fighting. We can also use it to assert the existence of a negative state of affairs, two people not fighting. But this does not help explain how the *picture*, the sentence, says that the two people are fighting. As Wittgenstein puts it in the 'Notebooks', 'the proposition represents the situation—as it were off its own bat' (Wittgenstein 1914–16: 26).

Recall that essentially the same problem arose for the 'Notes on Logic' account of how sense is determined. There the problem was understanding how a sentence like 'a is red' says that a is in one of the two categories determined by the predicate 'x is red'. The solution was that truth is associated with one of these categories; 'a is red' says that a is in the red group because our conventions for 'x is red' assign truth to the category of red things. The shift to the picture theory meant that this answer was no longer available. On the picture theory, the role of a predicate is to depict a way for objects to be related, not to divide objects into categories.

So the question about the picture theory is how to make sense of the asymmetry between what a proposition depicts and what it says. The asymmetry is that an elementary proposition depicts both positive and negative states of affairs, but it only says that the positive state of affairs exists. I do not want to dwell on this problem, although I think it may help illuminate the origins of Wittgenstein's views about meaning and use in his later philosophy. For present purposes we just need to know what it means for the judgement sentence 'A judges p' to express the bipolarity of p. This should be evident from how a picture determines its two poles. A picture shows a way for things to be and a way for things not to be. To present both of these possibilities is just to put the picture on display. This is what 'A judges p' does with p. The judgement sentence holds up the picture p, as it were, but does not use p to say that this is how things are or this is how things are not. The judgement sentence presents us with p but does not say anything with it. This idea is central to the account of judgement at 5.542.

6. Judgement in the Tractatus

In the *Tractatus*, 'a thought is a proposition with a sense' (4). This entails that thoughts are *sentences*. A remark in the 'Notebooks' from 9 December 1916 makes this clear:

Now it is becoming clear why I thought that thinking and language were the same. For thinking is a kind of language. For a thought too is, of course, a logical picture of the proposition, and therefore it just is a kind of proposition. (Wittgenstein 1914–16: 82)

There is also a letter to Russell from 19 August 1919:

I don't know *what* the constituents of a thought are but I know *that* it must have such constituents which correspond to the words of Language....

Does a Gedanke consist of words? No! But of psychical constituents that have the same sort of relation to reality as words. What those constituents are I don't know. (Wittgenstein 1995: 125)

If a thought is a sentence in a mental language, then to think a thought or make a judgement must be to construct a mental sentence. A judgement that p is an occurrence of a mental sentence with the same sense as p.

Roughly speaking, the theory of judgement in the Tractatus is an account of how judgement sentences report occurrences of mental sentences. The judgement sentence 'A judges p' reports the existence of a mental sentence with the same sense as p. Wittgenstein explains how this works at 5.542:

It is clear, however, that 'A believes that p', 'A has the thought p', and 'A says p' are of the form "p" says p': and this does not involve a correlation of a fact with an object, but rather the correlation of facts by means of the correlation of their objects. (5.542)

There are two things to understand here. The first is how 'A judges p' reports the existence of a mental sentence. The second is how 'A judges p' gives the sense of this mental sentence. Let us take these in turn.

Recall that by the time he dictated the notes to Moore in Norway Wittgenstein had decided that the subject term in 'A judges p' must, on analysis, reveal itself to have the logical complexity of a sentence. This idea reappears in 5.542. According to 5.542, 'A judges aRb' has the same logical form as "aRb" says aRb'. For Wittgenstein the quoted sentence "aRb" is not a name for a sentence but rather a fact in which names for names are arranged so that they depict the sentence 'aRb'. 15 In other words, the quoted sentence "aRb" is a picture of the linguistic fact 'aRb'. Now, suppose A thinks a thought with the sense of 'aRb'. That is, a mental sentence composed out of psychical constituents corresponding to the components of 'aRb' occurs in A. The quoted sentence "aRb" is a picture of this mental sentence, since A's mental sentence has the same sense as 'aRb' and "aRb" is a picture of 'aRb'. The quoted sentence "aRb" therefore shows the existence of the psychical fact that is A's thought.

That is not quite enough to report the existence of a mental sentence. To do that, the quoted sentence in the subject position of a judgement sentence has to say what it shows in the positive sense. The quoted sentence shows the existence of a psychical state of affairs. If it says what it shows, then it would say that this psychical state of affairs exists. I put this in conditional form because it is uncertain whether Wittgenstein held that judgement sentences say anything at all. Some commentators have argued that the Tractatus treats judgement sentences as pseudo-propositions that show

¹⁵ See Wittgenstein (1914–19: 113), including the editor's note.

something but do not say anything.¹⁶ Others think the texts leave this issue unsettled.¹⁷ Wittgenstein is not as explicit about this as one would like at 5.542 or in surrounding remarks. Nevertheless, I think it is safe to make the following conditional claim. If judgement sentences say anything, they say only that certain psychical facts exist, the mental sentences that are depicted by the quoted sentences in their subject positions. Any other information provided by judgement sentences, including information about the senses of these mental sentences, is merely shown. The reason for this last claim will become clearer in a moment.

This brings us to the latter half of 5.542, where Wittgenstein says that a judgement sentence is a 'correlation of facts by means of the correlation of their objects' (5.542). This is an explanation of how a judgement sentence gives the sense of a mental sentence. A judgement sentence presents two sentences: a quoted sentence in subject position and an unquoted sentence in object position, where the former is a picture of the latter. The unquoted sentence is merely put forward; it does not say anything in the judgement sentence. The quoted sentence in subject position may or may not say that a mental sentence exists; either way, it is also presented by the judgement sentence. The judgement sentence therefore presents two sentences, side by side, the first of which is a picture of the second.

For one fact to be a picture of another the two facts must be isomorphic. There has to be a one—one correspondence between the elements of the two facts, and there has to be a correspondence between the ways in which the elements of the two facts are related. If two elements in the pictured fact are related in a certain way, then the corresponding elements of the picture will depict them as related in that way.

Now, imagine having two isomorphic pictures presented to you, side by side. The correlations between the elements of the two pictures should jump right out. By looking at the two pictures you should be able to see correlations between the elements of the two pictures. This is what happens with 'A judges p'. The sentence presents isomorphic pictures, a picture of p and p. The correlations between the elements of these two pictures should be evident just from having these pictures put on display next to one another. This is how a judgement sentence is a 'correlation of facts by

¹⁶ Rosenberg (1968), Kenny (1973: 101), and Dayton (1976).

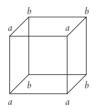
¹⁷ Hacker (1986: 86n) and Fogelin (1987: 76-7).

means of the correlation of their objects' (5.542). Two isomorphic pictures are put on display next to one another, thereby making manifest the correlations between their elements. The judgement sentence does not say that the elements of the pictures are correlated with one another. It shows the correlations through the juxtaposition of the two pictures.

This makes sense of why Wittgenstein would follow 5.542 with the following remark:

To perceive a complex means to perceive that its constituents are related to one another in such and such a way.

This no doubt also explains why there are two possible ways of seeing the figure as a cube; and all similar phenomena. For we really see two different facts.



(If I look in the first place at the corners marked a and only glance at the b's, then the a's appear to be in front, and vice versa). (5.5423)

The first remark in 5.5423 fits well with my reading of 5.542. The two pictures in a judgement sentence, along with the correlations between their elements, make up a complex that is put on display by the judgement sentence. By juxtaposing these two pictures the judgement sentence allows us to perceive the correlations between the elements of the two pictures. The judgement sentence shows the correlations and hence we perceive them, but it does not say that there are these correlations. The judgement sentence lays out the pictures side by side and thereby allows us to perceive the relations between the elements of the pictures.

The figure of the cube in 5.5423 also fits well. The figure does something analogous to what a judgement sentence does. The figure juxtaposes two squares, the a square and the b square, and shows the correlations between the vertices of the two squares with lines drawn between the corresponding vertices. Similarly, a judgement sentence juxtaposes two isomorphic sentences. Although the judgement sentence does not literally draw lines between the elements of these sentences, the correlations

between these elements will be evident from having the two sentences displayed side by side.

These correlations will reveal the sense of the thought depicted by the quoted sentence in subject position. The quoted sentence shows how the constituents of a thought are related to one another. All we need, then, in order to know the sense of the thought is to be shown the correlations between the elements of the thought and things in the world. The connections to things in the world come in through the unquoted sentence in object position. The elements of the unquoted sentence are correlated with things in the world, and these correlations are included in what is shown by the judgement sentence. Remember that p in 'A judges p' expresses its bipolarity—it shows how things are and how things are not. For it to do that, the correlations between the elements of p and things in the world have to be included in what is presented when p is presented in the judgement sentence. So the constituents of the quoted sentence in subject position, which stand for elements of the thought, are correlated with elements of the unquoted sentence that are correlated with things in the world. The judgement sentence strings these correlations together and puts them all on display, thereby revealing the correlations between the constituents of the thought and the objects in the world they stand for.

Finally, it should be clear how the account at 5.542 navigates through the dilemma about judgement sentences. The dilemma was that in ${}^{\iota}A$ judges p' the sentence p does not occur as the input to a truth-function and it cannot be an argument to a predicate, but still has to occur as a complete sentence with a sense. Wittgenstein's solution in the Tractatus was to view judgement sentences as vehicles for putting sentences on display. The predicate 'judges' provides a kind of frame or scaffolding for presenting two sentences side by side. By positioning two sentences on either side of 'judges' we make it possible to see the connections between the elements of the two sentences. This is different from combining sentences with truth-functional connectives, the point of which is to generate a new sense and new truth-conditions out of the senses of the component sentences. The point of combining sentences with 'judges' is not to generate a sentence with a new sense but to put pictures forward in order to show how these pictures are related to one another.

7. Conclusion

Wittgenstein once described his theory of logical propositions as 'only a corollary' to 'the theory of what can be expressed by propositions—i.e. by language—(and, which comes to the same, what can be thought) and what can not be expressed by propositions, but only shown; which I believe is the cardinal problem of philosophy' (Wittgenstein 1995: 124). The same can be said about his theories of judgement. The accounts of judgement sentences in 'Notes on Logic' and the Tractatus are very different, but the method that led Wittgenstein to these theories was the same. In both cases, his fundamental problem was understanding how elementary sentences represent the world how they determine the possibilities in which they are true or false, and how they say that one of these possibilities obtains. His accounts of judgement are attempts at extending and applying these views about elementary sentences to sentences about judgement and belief. In 'Notes on Logic', a judgement sentence sorts objects into categories. In the Tractatus a judgement sentence presents pictures. Both of these theories are based on Wittgenstein's more fundamental ideas about how names and predicates combine to form elementary sentences that say things about the world.

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The *Tractatus* and the Unity of the Proposition

STEWART CANDLISH AND NIC DAMNJANOVIC

'The Unity of the Proposition' is a label for a problem that has intermittently intrigued philosophers but which for much of the last century lay neglected in the sad, lightless room under the stairs of philosophical progress, along with other casualties and bugaboos of early analytic philosophy such as the doctrine of internal relations, the identity theory of truth, and Harold Joachim. Yet it was while struggling with this problem, among others, that Bertrand Russell built one of the first steps on the staircase by creating what came later to be called the theory of descriptions.¹

According to that theory, statements containing definite descriptions are true only if there exists a unique thing satisfying the description. So nothing one says about 'The Problem of the Unity of the Proposition', for example, can be true unless there is one and only one such problem. Yet, as we shall explain below (§1), on the one hand it is unclear that there is *any* such problem at all, while, on the other, if there *is* a problem, there seem to be several. One might conclude, then, that everything we say in this chapter is likely to be false. But perhaps the chapter could, in the context, be

¹ Russell ([1905] 1994). Palmer (1988: 19f) suggests that Russell's earlier theory of denoting concepts was directed at accounting for the unity of the proposition; consistently, he goes on (1988: 25) to suggest that in 1905 Russell's introduction of the variable in his new theory was aimed at 'safeguarding the unity of the proposition'. Stevens (2005: ch. 6) argues that Russell was still wrestling with this problem in his later work, up to and including Russell (1948). But our claim of neglect still applies: as Monk (2000: 295) pointed out, '[T]he view that *Human Knowledge* was inferior to Russell's earlier work was, and still is, almost unanimously held by professional philosophers... both the questions raised in *Human Knowledge* and the solution to them offered by Russell seemed, in the late 1940s, to be hopelessly out of date.'

appropriately treated as a ladder, to be kicked away after climbing. For Wittgenstein, too, was concerned with the problem: 'At the centre of Wittgenstein's project was the task of explaining the unity of the proposition', says Michael Potter, for example.²

Wittgenstein had inherited the task from two of his philosophical mentors, Russell and Frege. Yet while Russell's series of failed accounts of propositions, and then judgements, each of which was meant to resolve the problem, seemed ultimately to serve only as a sort of negative inspiration for him,³ Frege's response to the problem proved a deep influence. We will outline Frege's position as a backdrop to Wittgenstein's below (§§2 and 3). As we will argue, one of the most important ways in which Wittgenstein's position resembles Frege's is precisely that his (Wittgenstein's) solution to the problem of unity required treating his own book as an attempt to say the unsayable. Our goal in what follows, now that the problem of unity is once again out from under the stairs,⁴ is to shed some light on whether, and if so why, a Wittgensteinian solution to the problem requires us to pay such a steep price.

1. The problems of the unity of the proposition

For what follows, it will help to have in mind the sense in which there are several problems of the unity of the proposition, and the sense in which there is none. And, given the many ways in which the term 'proposition' is used, it will also be helpful to keep in mind that we begin by using it in a broad way, to indicate the things we assert or judge, ignoring the differences among philosophers as to the proper account of those things until the details of those differences become important to the narrative.

² Potter (2009: 109).

³ We hope that this fact, and the fact that one of us has already given a detailed account of Russell's struggle with the unity of the proposition at that time, will be enough to justify largely neglecting him in the limited space we have here. See Candlish (1996, 2007: ch. 3). See also Potter (2009 passim).

⁴ The twenty-first century has witnessed a new focus on the problem. See, *inter alia*, Davidson (2005), King (2007), Gaskin (2008), and the string of papers about it (plus Gaskin's reply) in *dialectica* 64/2, 2010, and Soames (2010).

Here is the sense in which there are several problems of the unity of the proposition.⁵ If there is a basic, or core, issue that has been discussed under the heading 'the unity of the proposition' it is this:

Unity: What is the difference between a proposition and a collection (or a list) of its constituents?

Behind this question lie the assumptions that propositions have constituents and are unified entities: that is, that the mere existence of the constituents, in the absence of their combination, does not itself constitute the proposition. The question, then, is what is it that explains the existence of the proposition over and above the existence of its constituents?

But once one thinks that there is a problem here concerning how the constituents of propositions combine to make a whole, several distinct further problems emerge. For example, it quickly looks as if not just any collection of things can be combined to form a proposition, even though all of those things individually may be constituents of some proposition or other. Thus, it seems, *Cicero* and *Caesar*, whether we think of these as words, as concepts, as senses, or as people, cannot, on their own, make a proposition. Moreover, even if several things can be combined to form a proposition, they can do so only when combined in a certain way. Thus, for example, Caesar and the property of being powerful might be able to make a proposition, but only when the property is predicated of the man, and not the other way around. We can summarize this problem as follows:

Combination: Which things can be combined to make propositions in which order, and why?

Like *Unity*, *Combination* centres on the question of how the constituents of propositions could possibly combine to make a unity.

But even if these questions can be answered, they must be answered in a way that respects various truths about propositions. In particular, an account of how the constituents of propositions combine to form a unity must explain how the proposition that Caesar pardoned Cicero is different from the proposition that Cicero pardoned Caesar, even though these

⁵ It is a relatively familiar point that there are several problems here, but the point is made particularly well by Sainsbury (1996) and Eklund (unpubl. ms). We use some of the same names for the various problems as Eklund.

propositions presumably contain (at least some of) the same constituents. We have, then, the following question:

Order: What is the difference between two propositions which represent the same things standing in the same non-symmetric relation, but with the relation running in opposite directions?

Another problem that will be important for what follows arises from the claim that a proposition can exist without being true.

Falsity: How can there be false propositions?

If a proposition is a unity, then its constituents must be combined in a way that does not automatically make it true. While this may seem obvious, it is in fact a difficult constraint to meet for those who think that propositions are composed of real-world constituents such as objects, properties, and relations.⁶ It is also worth noting that *Falsity* is the first of our problems related to a unique feature of propositions, and is one for which there is no counterpart problem applicable to facts (thought of as what make true propositions true).

Finally, as *Falsity* makes clear, propositions are a special kind of thing in that they can be asserted or judged. It is therefore not enough, in giving an account of the unity of the proposition, that we answer all the questions above. We must also explain how it is that the constituents of propositions, which cannot themselves be judged or asserted, may be combined into something which can be.⁷ Since it is common to assume that what we can judge or assert is (or has) representational content, the final problem is naturally expressed as follows.

Representation: In what do the representational properties of propositions consist?

Although it is not immediately obvious why this problem should be thought of as concerning the *unity* of the proposition, we think it both has been, and should be, so thought of.⁸ We have already given one reason for this: it is a constraint on any account of the unity of propositions that it

⁶ For example, Russell (1903) and Gaskin (2008).

⁷ Compare Linsky (1992: 263-4).

⁸ Eklund (unpubl. ms) is unsure that *Representation* has anything to do with the unity questions. For Gaskin (2008), *Representation* cannot arise, since on his view propositions are what gets represented, not what do the representing.

explain what it is that grounds their representational properties. But there is another reason that will become clearer as we proceed. *Unity* and *Representation* can appear to work against each other: the more one thinks of propositions as unified *things*, the harder it is to see how they could represent the world as being one way or another.

We have laboured the point that there are several different problems that can be thought of as problems of the unity of the proposition because it was a recognition of this variety of issues that drove Wittgenstein to his account of propositions in the *Tractatus*. In the end, we will see that Wittgenstein's position dissolves many of these problems. For him, propositions are not structured entities, they are not composed of real-world constituents, and they are not essentially representational. This is the sense in which there may be no problem of the unity of the proposition. There are no problems for those who, like Wittgenstein, reject the rather substantial assumptions which generate them.

2. Frege, Unity, and Combination

There is a sense in which Frege too did not face the *Unity* question. This is because he often claimed that he did not begin with the constituents of propositions and then wonder how they could be put together. Instead, he began with the proposition as primary and treated propositions' constituents as abstractions from them.⁹ On this approach, the constituents of propositions are parasitic upon the whole, and are defined by the way they hold together in such wholes. And if we begin with the primacy of the proposition, questions about how the building blocks of propositions can be cemented together to make a unity cannot even get a foothold.¹⁰

Nevertheless, Frege thought that propositions could be analysed into constituents. Indeed, his logic depended on there being discernible parts of propositions: it required that these parts come in different varieties, so that if we were to try to substitute an element of a proposition for another,

⁹ Frege expressed these ideas as early as 1882 (p. 101) and as late as 1919 (p. 253). However, prior to his making the sense/reference distinction, Frege's view is best expressed as a view about 'judgeable contents' rather than what we more regularly think of as Fregean propositions (i.e. *Gedanken*).

¹⁰ '[Hence] the problem of the unity of the proposition simply does not arise for him' (Textor 2009: 63, n. 6).

only certain sorts of substitution would do. Because of these commitments, he at least faced the question of what sorts of parts propositions can be analysed into and why analysis can abstract only certain combinations of them. That is, he faced the question of *Combination*.

Frege's answer to this question famously relied on one of his guiding thoughts in the *Grundlagen*:

[N]ever to lose sight of the distinction between concept and object.¹¹

For Frege, the dividing line between concept and object is bright: these are two types of thing that are essentially different so that nothing can be both a concept and object. Objects are self-contained, complete, or 'saturated' entities, such as tables, people, and cities. Concepts are a type of function, and functions are incomplete or 'unsaturated'. Consider the following function:

$$2.()^3+4$$

Following Frege, we have symbolized the function by leaving a gap where the argument–expression should go, rather than using the conventional x and rendering it as $2x^3 + 4$.¹² This makes it clear in what sense the function is unsaturated. By inserting an argument into the gap—say the number 3—we complete the function, which now delivers a value: in this case the number 58. Concepts are simply a special case of functions in that they can take *any* object as an argument but assign only one of two values, True or False. For example, POWERFUL can take Caesar as argument and would (for the adult Caesar) give True as the value.¹³

Thus (to use the language of romance) concepts and objects are made for one another: the one completes the other. Frege offers the following analogy.

We may compare this with the division of a line by a point. One is inclined in that case to count the dividing-point along with both segments: but if we want to make

¹¹ Frege ([1884] 1968: x).

¹² That is, instead of the more usual approach of using a variable. Frege ([1904] 1960d: 114–15) thought the usual practice confusing in that it uses a variable both to signify the empty place for an argument and as a sign for generality, encouraging treating the sign for an argument as part of the sign for a function.

¹³ We use the convention of putting concept words in small capitals when we wish to refer to the concept.

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a clean division, i.e. so as not to count anything twice over or leave anything out, then we may only count the dividing-point along with one segment. This segment thus becomes fully complete in itself, and may be compared to the argument; whereas the other is lacking in something—viz. the dividing-point, which one may call its endpoint, does not belong to it. Only by completing it with this endpoint, or with a line that has two endpoints, do we get from it something entire.¹⁴

We can, after a fashion, make Frege's point graphically: if we start with a line segment with two endpoints, as in Figure 3.1,



Figure 3.1: Line segment with two endpoints

and abstract from it exactly two parts, so that every point on the original line belongs to exactly one of the two resulting segments, then we are left with the following:



Figure 3.2: Division of a line by a point

In Figure 3.2, the right-hand segment is represented as lacking an endpoint. The dividing-point belongs only to the left-hand segment (of course, strictly speaking, a line segment without an endpoint is impossible to draw). Thus the right-hand segment is incomplete.

Before he made the sense/reference distinction, Frege spoke as if the metaphor of the line could be applied to what he called 'judgeable contents'. That is, when we start with a subject—predicate judgement and abstract two parts from its content, we end up with one complete part and one incomplete part—the two parts being an object and a concept. Thus if we start with the judgeable content that Caesar is powerful and abstract two parts, then we would end up with the complete object Caesar and the incomplete concept POWERFUL.

For the mature Frege, of course, the situation was more complicated, since he believed that every semantically significant expression has both a sense and a referent.¹⁵ Thus a name has an associated sense which is a mode

¹⁴ Frege ([1891] 1960a: 25). ¹⁵ Frege ([1892] 1960c).

of presentation of its referent, that referent being an object. Likewise a predicate expression has a sense which is a mode of presentation of its referent, that referent being a concept. A sentence expresses a proposition, or Thought (*Gedanke*), which is composed of the senses of the semantically significant components of the sentence, and refers to one or other of the truth-values, the True and the False. The proposition/Thought is a mode of presentation, either of the True or of the False.

Since propositions (*Gedanken*) are composed not of concepts and objects, but of senses, Frege had no particular problem with *Falsity*: more specifically, he did not need to worry that making propositions unities would thereby make them facts in any ontologically significant way. ¹⁶ Likewise, Frege could also provide a straightforward answer to *Representation*. Since senses are defined to be representational, to the extent that the account of senses works, we cannot ask how propositions represent. Yet while this answer is fine as far as it goes, it is not clear how far it does go. For it is one thing to treat propositions as representational content. But it is quite another to say as well that they are unified entities in their own right. How can a unified, mindindependent entity also just *be* representational content? We will return to this question below.

More importantly, postulating senses as the constituents of propositions meant that Frege could not appeal directly to the distinction between concepts and objects in answering *Combination*. To deal with this, he adjusted his position by holding that the modes of presentation for unsaturated entities and saturated entities are themselves unsaturated and saturated respectively:

Not all the parts of a thought can be complete; at least one must be 'unsaturated', or predicative; otherwise they would not hold together.¹⁷

It is worth emphasizing that Frege took this position about the unsaturatedness of senses to be justified, indeed required, by the problem of *Combination*. In the passage following the quoted sentence, he makes it clear that he thinks that unless the thought contains an unsaturated component a form of what is now known as Bradley's regress would arise. ¹⁸ His opponent at this

¹⁶ Frege did think that facts were nothing more than true propositions, however (Frege [1918] 1977).

¹⁷ Frege ([1892] 1960b: 54).

¹⁸ Bradley's regress is often extracted from his work and treated as an argument in isolation. For a discussion of the complexities surrounding the original argument, see Candlish (2007: ch. 6).

point is someone who thinks that the sense expressed by a predicate might be saturated, and that 'the concept POWERFUL' might express such a saturated sense. In reply, Frege argues that two saturated things cannot 'hold together' without some sort of relation holding them together. But if this relation could likewise be referred to with the expression 'the relation that holds between a thing and a concept it falls under' then the sense of that expression would likewise be saturated and there would need to be further relations holding each original sense together with this one. If this process is not to continue infinitely, there must somewhere be, according to Frege, an unsaturated sense which is the mode of presentation of an unsaturated concept which, in turn, can never be the logical subject of a proposition (i.e. can never be referred to by proper names or definite descriptions).

Whatever the motivations for Frege's view, at this point two of his metaphors—modes of presentation and unsaturated entities—and several of his theoretical commitments have converged and the result is far from clear. One problem is this. Without ever giving up the idea that concepts are unsaturated and objects saturated, Frege later came to insist that concepts and objects do not combine to form unities. To use one of his own examples, the concept THE CAPITAL OF, if given Sweden as argument, yields Stockholm as its value, and yet Stockholm is not a whole with Sweden as a part. 19 Likewise, the sentence 'Skippy is a kangaroo' is a complex name for the True, but the True is not a whole which contains IS A KANGAROO and Skippy as constituent parts. But if this is right, then presumably the senses of predicate expressions must be unsaturated in a way different from that of the concepts they refer to, since Frege insists that propositions are wholes with senses as constituents. Given that our only grip on the unsaturated metaphor was through functions (and so concepts), the notion of an unsaturated mode of presentation is left unexplained.20

Moreover, although we began this section by pointing out Frege's commitment to seeing the constituents of propositions as abstractions from a primary whole, he also often spoke of propositions as if they were constructed out of building blocks:

¹⁹ Frege (1919: 255).

²⁰ For a useful discussion of how unsaturated senses should be understood, with extensive references to the secondary literature, see Klement (2002: 56–76).

...thoughts have parts out of which they are built up. And these parts, these building blocks, correspond to groups of sounds, out of which the sentence expressing the thought is built up, so that the construction of the sentence out of parts of a sentence corresponds to the construction of a thought out of parts of a thought.²¹

This further commitment makes Frege's overall position even more difficult to divine. We will return to this issue briefly later. For now, it is enough to notice that Frege appears to owe us an answer to *Unity*, as well as to *Combination*, after all.²² But, if he does so owe us, a further step is needed: to open a door it is not enough to have a 'saturated' key and an 'unsaturated' lock; the former must also be actually inserted into the latter.

3. Frege and the unsayable

If the distinction between saturated and unsaturated entities was needed only to explain how a proposition can 'hold together', then it may well be thought that the resulting obscurity was not justified and Frege should have simply given up the idea that propositions were unities. But he appealed to the distinction between concepts and objects, and the matching distinction at the level of sense, for a variety of other purposes, including his account of quantification. Quantifiers are higher-order concepts, and to assert that someone is powerful is to assert that the concept POWERFUL falls within the second-level concept SOME. And the first-level concept POWERFUL falls within the second-level concept some if and only if there is an object which when taken as argument by the concept POWERFUL returns the value True. As objects are not functions, it thus makes no sense to say of an object that it falls within a second-order concept.²³

Yet while Frege's treatment of quantification, and development of predicate logic more generally, was undoubtedly a major breakthrough, it introduces further obscurities into his account of the constituents of

²¹ Frege (1914: 225).

²² As Textor points out in the footnote already cited, in correspondence Frege sometimes takes himself to be providing an answer to *Unity*. The matter is well discussed by MacBride (2005) and Gaskin (2008: 283).

²³ Textor (2009: 64) points out the need for an unsaturated component in Frege's account of inferring particular truths from general ones.

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propositions. For when we analyse a simple quantified proposition, such as the proposition that everything is powerful, we find the senses of two *concepts* (albeit of different orders). But since concepts, and their corresponding senses, are essentially unsaturated we now have unities resulting from the combination of two unsaturated entities. How are we to extend the metaphor of a saturated entity's combining with an unsaturated one to form a unity, so that it covers two unsaturated entities doing so?²⁴ His own arithmetical examples serve to bring out the problem: the function $2 \cdot ()^3 + 4 = 58$ will yield the value True for the (saturated) argument 3, and False for the (saturated) argument 4. But an attempt to construct an arithmetical proposition, true or false, by inserting an unsaturated argument (e.g. $3 \cdot () + 7$) into the gap in that function does not result in a saturated entity, and neither of the truth-values is yielded. Certainly Frege's dubious analogy of the line is no help here, since two line segments that each have only one endpoint cannot be combined to make a line segment with two endpoints. Perhaps a better analogy would be that of two molecules which might each be unsaturated in the sense that they each have one bond available—but which can join together to form a saturated molecule.²⁵ Even so, it remains unclear how a function's taking a lower-level function as argument is supposed to be like the combining of two unsaturated molecules; talk of levels seems inappropriate to the latter.

The problem is worse than mere obscurity, however. For Frege appears to be committed to inconsistent claims. Consider the following two sentences.

- (1) There is a square root of four.
- (2) The concept square root of four is realized.

On Frege's account of quantification, (2) is a restatement of (I): the two sentences express the same (true) proposition. However, (2) has the expression 'the concept square root of four' in the subject position and this, for Frege, cannot refer to a concept but must refer to an object. Thus, despite appearances, (2) says something about an object, not the concept square root of four. On the other hand, as an existentially quantified sentence, (I) says something that can be said only of a concept. But the fact that the

²⁴ Linsky (1992: 265) raises this worry; Gaskin (2008: §38) develops it.

²⁵ See, for example, Dummett (1981: 263).

two sentences express the same proposition seems to imply that the sense of the concept square root of four both is and is not a constituent of the one proposition expressed by both sentences.²⁶

Frege noticed the looming inconsistency himself and had the following response to those who wondered how the two sentences can express the same proposition.

This will be surprising only to somebody who fails to see that a thought can be split up in many ways, so that now one thing, now another, appears as subject or predicate. The thought itself does not yet determine what is to be regarded as the subject.... It is thus not impossible that one way of analysing a given thought should make it appear as a singular judgment; another as a particular judgment; and a third, as a universal judgment.²⁷

Thus, it is not the case that a thought has one correct decomposition. The same thought which can be treated as referring to an object and saying something about it can also be treated as saying something (but something different) about a concept.

While this move may deflect the charge of obvious inconsistency, it is not clear whether it preserves Frege's overall position. In particular, it is difficult to see how the idea that a thought can be decomposed in various ways is consistent with his other assertions that thoughts are constructed from building blocks and that there is one correct *analysis* of any proposition.²⁸ It is also unclear how much the move really helps with *Combination*. True, on one analysis of the proposition that is expressed by the two sentences, the constituents 'hold together' because one is saturated and one unsaturated. The fact remains, however, that there is also a correct way of analysing the proposition, which leaves us with only unsaturated entities.

That this continues to be a problem for Frege is highlighted by his own famous struggle with the problem of the concept HORSE. Consider (2) again. Its first six words appear to refer to a concept. Yet Frege insists they refer to an object. Thus on his account (3), despite appearances, is true:

(3) The concept HORSE is not a concept.

²⁶ Soames (2010: ch. 2) also suggests Frege's doctrines about quantification are inconsistent with his solution to the unity problem.

²⁷ Frege ([1892] 1960b: 49).

²⁸ For an attempt to interpret Frege's position consistently, and a distinction between decomposition and analysis, see Dummett (1981: ch. 15). See also Klement (2002: 76–88) and Gaskin (2008: §67).

Frege was forced to accept this position about (3) not only because, as he himself said, 'the singular definite article always indicates an object',²⁹ but also because his answer to *Combination* required him to do so. That is, proper names cannot refer to concepts because if the subject of a sentence were a concept, then the two constituents of the proposition would both be unsaturated or predicative.³⁰ And if this were so, he would lose his account of how the constituents of propositions of subject–predicate form are combined.

But even if we put this on one side, any position that forces us to accept (3) is still obviously unsatisfactory. Faced with this difficulty, Frege ultimately retreated to the idea that it was the result of an irremediable defect of language. We simply cannot talk about concepts without ending in paradox and so there are some things that language cannot express. To deal with this fact, an adequate formal language would not allow us to make first-order predications of concepts.³¹ Most especially, such a language would not have the predicate 'is a concept'.

This move may allow Frege to deal with the problem created by (3), even if it does so in a rather *ad hoc* fashion. It is important to see, though, that i) this problem is due, at least in part, to Frege's answer to *Combination*, and ii) he 'solves' the problem only by making talk of concepts and functions impossible. It is also important to see that it does not really help with our worries about how the account of subject—predicate propositions can be extended to quantified ones. It is perhaps not surprising, then, that, while Wittgenstein adopted Frege's idea that there are certain things our language is incapable of expressing, he did not accept Frege's account of quantification. In fact, he did not accept that account precisely because it obscured the applicability of his own solution to the problems of unity. As we will see, this was not the only defect Wittgenstein found in Frege's position. But one lacuna Wittgenstein did not comment on, as far as we are aware, was that Frege said nothing explicit about the problem of *Order*. Wittgenstein was

²⁹ Frege ([1892] 1960b: 45).

³⁰ 'Consequently, one would expect that the referent of the grammatical subject would be the concept; but the concept as such cannot play this part, in view of its predicative nature; it must first be converted into an object, or, more precisely, an object must go proxy for it' ([1892] 1960b: 46, translation slightly emended).

³¹ See, for example, Frege (1906: 193). For discussion see Dummett (1981: ch. 12, especially 239ff).

very familiar with this problem, as it plagued Russell's attempts to construct a coherent multiple relation theory of judgement. As a result, Wittgenstein's own account was designed with *Order* squarely in mind.

4. Wittgenstein: from Russell towards Frege

As is well known, Wittgenstein's earliest work in philosophical logic was profoundly influenced by Russell. In particular, in 1912, Wittgenstein seems to have been working with the Russellian (originally Moorean) idea that the constituents of a proposition were those same things (objects, relations, properties) it was about,³² and was thus struggling with how to answer the question of *Falsity*. To do so, Wittgenstein supposed that in a proposition such as *Socrates is mortal*, the 'is', or copula, was what united Socrates and Mortality. More specifically, the copula was of the right form so that it could combine the relevant number of entities in just the right way. For subject—predicate propositions, for example, the copula had the form $(\exists x, y)$ $\epsilon_1(x, y)$, that is, 'Something is predicated of something'.³³ In this way, the proposition has a constituent that facts, for example, lack, and so false propositions appear possible.

By 1913, however, Wittgenstein had made two dramatic shifts away from this picture.³⁴ The beginning of one move is announced in a letter to Russell on 16 January:

I [now] analyse a subject–predicate proposition, say, 'Socrates is human' into 'Socrates' and 'Something is human' (which I think is not complex). The reason for this is a very fundamental one: I think that there cannot be different Types of things! In other words whatever can be symbolized by a simple proper name must belong to one type. And further: every theory of types must be rendered superfluous by a proper theory of symbolism: For instance, if I analyse the proposition Socrates is mortal into Socrates, Mortality and $(\exists x, y) \epsilon_1(x, y)$ I want a theory of types

³² Cf. Potter (2009: §§2.1, 2.2). It is hard to be sure, but the idea seems to be there, unexpressed, as a background assumption. Wittgenstein's letter to Russell of 16 January 1913 (quoted below) can be read as describing his previous view this way; but he may just have been careless about use and mention (Wittgenstein [1912–48] 1974: 19).

³³ It is not clear whether this idea was Russell's or Wittgenstein's. In his letter to Russell of 26 December 1912 Wittgenstein wrote of 'our Theory of Symbolism' ([1912–48] 1974: 17).

³⁴ Here we are indebted to Potter (2009), particularly chapters 8 and 12.

to tell me that 'Mortality is Socrates' is nonsensical, because if I treat 'Mortality' as a proper name (as I did) there is nothing to prevent me to make the substitution the wrong way round. But if I analyse [it] (as I do now) into Socrates and $(\exists x)x$ is mortal or generally into x and $(\exists x)\varphi x$ it becomes impossible to substitute the wrong way round, because the two symbols are now of a different kind themselves.³⁵

As Michael Potter points out, this marks an important shift towards Frege's position.³⁶ For instead of using a copula to combine the elements of the proposition (which Wittgenstein thought were each referred to by proper names), he now has only one object, Socrates, and a *form* $(\exists x)\varphi x$: in this example, 'Something is human'. Moreover, the symbols used to represent each of these are of a quite different kind, and this prevents us from making nonsense sentences. That is, some components of the sentence are saturated and some not; there is no empty place in the expression 'Socrates', as the 'x' shows that there is in ' $(\exists x)\varphi x$ '. A form is not quite a Fregean concept; but we should not be surprised that this shift to forms occurred soon after Wittgenstein's conversation with Frege in late 1912.

While Wittgenstein was moving towards Frege at this time, the role he gave to the notion of a logical form in his account was still very much Russellian.³⁷ For both Russell and Wittgenstein at this time, these logical forms remained a sort of existential proposition (or existentially general fact).³⁸ Soon, though, Wittgenstein gave up even his revised version of this notion of logical form as well. One reason for this move was simply that

³⁵ Wittgenstein, Letters to Russell, Keynes and Moore ([1912-48] 1974: 19).

³⁶ Potter (2009: 80). It is now quite widely accepted that something like the objection Wittgenstein raises to his own earlier theory in the quotation above is the one he also made to Russell's multiple relation theory of judgement, the objection which brought Russell's 1913 *Theory of Knowledge* project to a halt even if it did not convince Russell that the multiple relation theory was fundamentally misconceived. (It was Russell's changing his mind in 1919 about the existence of the ego that did that.)

³⁷ Russell at this time was moving on to his third version (or fourth, if one counts the tentative prototype of 1907) of the multiple relation theory of judgement and had abandoned talk of propositions, but he nevertheless appealed to the notion of a logical form as one of the objects united by the act of judging. See Candlish (1996) for a detailed account of Russell's shifts of position.

³⁸ This is not Russell's own description of his view, and not merely because his recent adoption of the multiple relation theory of judgement required him to replace talk of propositions with talk of judgements, which are a kind of mental act. Indeed, he tried ([1913] 1992: 113–14) to argue (for very good reason) that a form must be simple and could not itself be a constituent of a propositional act of judgement (even though he held it to be an object of acquaintance). Russell was certainly aware of the problems with his view, but his treatment of them is not much more than a desperate attempt to reconcile the irreconcilable. Stevens (2005: 94), discussing a 1912 manuscript in which Russell had faced the same problem, presents him as facing an impossible dilemma about forms. For a fuller presentation of the issues in 1913, see Candlish (2007: 69–73).

such forms were themselves propositions and so could not help explain how propositions in general are unified. And there is an even deeper worry too. For a proposition to exist, it must involve a particular logical form, which means, under the current analysis, that some existential proposition must be true. But why should it follow that it is true that something is human (or, on the earlier analysis, that something is predicated of something, where it is clear that 'something' really means 'some thing') simply because there is, say, a (false) proposition that Bucephalus is human? These existential propositions appear contingent and thus it seems implausible that the existence of the proposition should depend on their truth.³⁹ As a result, Wittgenstein fairly soon gave up the idea that a subject—predicate proposition is composed of an object and a form. Yet, as we will see, he maintained the Fregean idea that propositions have unsaturated constituents and that the unifying features of propositions could not be talked about.

In the meantime, without a form as a constituent of a proposition, Wittgenstein faced the problem of *Falsity* once again. It is not surprising, therefore, that in this same period his thinking underwent a second major shift: he definitively left behind any lingering influence of the Russellian idea which makes *Falsity* so hard, namely the idea that propositions have real-world constituents.⁴⁰ This is another major step towards Frege.

5. Wittgenstein contra Frege

While, as we have just seen, Wittgenstein moved two paces closer to Frege during this period, there are two important ways in which he remained at a distance. First, he did not follow Frege so far as to accept that the constituents of propositions were senses, remaining firmly Russellian in rejecting a two-step semantic theory. Whatever his reason for this refusal (and he seems never to have given one), it meant that he focused his attention on propositional signs, the perceptible signs that can express propositions.

³⁹ Wittgenstein makes the definitive criticism of his earlier view in the *Notebooks* entry for 21.10.1914.

⁴⁰ It is unclear exactly when he made this move, but it is clear that he had made it by the time he composed the Birmingham version of the *Notes on Logic* (for example B77 (Potter 2009: 284)). Potter (2009: 63–4) thinks it is already visible in the letter of 16.1.1913 just quoted.

The second important point of difference between Wittgenstein and Frege is that Wittgenstein did not treat propositional expressions as complex names. Frege's view obviously raises the question of how propositional expressions, as names, could be used to assert anything. And his own answer to this good question was, in effect, that asserting a proposition requires using a sentence to refer to the appropriate truth-value (we may not know which) and then adding the claim that that truth-value is the True. For example, we may assert that the truth-value of Caesar's being powerful is the True. 41 One need not worry that asserting this differs from asserting that Caesar is powerful since, according to Frege, those two assertions are the same. At least at one point, Wittgenstein agreed that attributions of truth to propositions are no different from the propositions themselves. 42 But he could not accept the Fregean idea that (unasserted) propositional expressions are names.

He gives the argument against Frege's view in the Tractatus at 4.063, which he frames as an explanation of the concept of truth.⁴³ In essence his point is this. To assert a subject-predicate proposition is, first, to name something, and, second, to ascribe some property to that thing. Further, although ascribing a property to a thing requires the conditions under which that thing has that property to have been determined, we can name the thing without those conditions having being determined. By analogy, if Frege was right, then a propositional expression should still be able to function as a name, and so pick out the appropriate truth-value, even if the conditions under which the proposition is true (or false) have not been determined. Yet on Frege's own account the sense of a proposition is determined by the conditions under which it is true or false. So a proposition for which these conditions have not been determined lacks determinate sense, which, for both Frege and Wittgenstein, amounts to lacking sense tout court. And propositions that lack sense are neither true nor false. Thus the propositional expression surely cannot name either the True or the False in this case, and the assimilation of such expressions to names breaks down.

⁴¹ This is the translation of Frege's use of the assertion sign in Klement (2002: 29).

⁴² Notebooks 6.10.14. In this entry, he seems to combine this 'deflationary' view with a sort of correspondence theory of truth, *contra* Frege, but implies that this theory is inexpressible, 'can only be shown'.

⁴³ The point is taken directly from the Birmingham version of the *Notes on Logic* (Potter 2009: 277, B10).

So, for Wittgenstein, propositional expressions are not names of objects, and propositions have neither senses nor forms as constituents. What, then, are these things?

6. Propositions

The first thing to notice about Tractarian propositions is that they are not further entities between propositional signs, which include sentences as a type, and worldly facts. Instead, 'the proposition is the propositional sign in its projective relation to the world'.⁴⁴ Contained in the notion of the 'projective relation' is (i) the difference between a propositional sign and a proposition, and (ii) part of Wittgenstein's answer to the question of how a proposition represents the world as being a certain way.

We are told that an elementary propositional sign is a combination of names, which are themselves simple signs. If we put aside for the moment questions about how a collection of names can represent anything, we can focus on how it is that a mere something can become a name. It does so, of course, by being arbitrarily or conventionally correlated with some particular object. These conventional correlations Wittgenstein calls 'projective relations'. So a proposition is a propositional sign, which consists of names, together with the conventional correlations of the names with certain objects. In a manner to be described below, the way the names are arranged in the propositional sign is meant to explain how such a sign can have truth-conditions, rather than be merely a set of names.

This description of the Tractarian proposition makes it sound as if it is an interpreted sentence (or, more generally, propositional sign). But, in an initially opaque pronouncement, Wittgenstein adds that 'a proposition, therefore, does not actually contain its sense but does contain the possibility of expressing it'.⁴⁵ And this suggests that the proposition, not just the propositional sign, is not on its own significant, or at least not essentially significant.

The reason Wittgenstein refuses to allow propositions to contain their sense is not obvious from his presentation, but is in fact more straightfor-

ward than it seems. To see this, it helps to recall that Wittgenstein asks us to think of propositions as pictures. About pictures he says:

- 2.202 A picture represents a possible situation (Sachlage) in logical space.46
- 2.203 A picture contains the possibility of the situation that it represents.

And:

- 2.22 What a picture represents it represents independently of its truth or falsehood, by means of its pictorial form.
- 2.221 What a picture represents is its sense.

These remarks help us to understand the reasons he then gives for why a proposition cannot contain its sense.

3.13 To the proposition belongs everything which belongs to the projection; but not what is projected.

Therefore, the possibility of what is projected but not this itself.

In the proposition therefore its sense is not contained, but the possibility of expressing it.

The proposition does not contain what is projected because what is projected is its sense, and its sense is a possible situation. If the proposition contained a possible situation, then the account would fall foul of *Falsity*, since the only way a proposition—which, recall, is an actual sign plus projective relations—could do so would be to contain the situation itself, which would thus be actual. Instead, the proposition contains only the possibility of the situation, not the situation itself.

Since propositions do not contain their senses, they are not essentially significant. But a proposition does contain the possibility of *expressing* its sense: the sense is expressed when we *use* the propositional sign as a picture. This avoids the problem of *Falsity*, since expressing a sense, by using the propositional sign as a picture, is not to incorporate the sense, that is, the possible situation, into the proposition. Instead, it is to use the propositional sign as a projection of the possible situation.⁴⁷ This does not require that the

⁴⁶ Pears and McGuinness translate 'Sachlage' as 'situation'. Ogden translates it as 'state of affairs', which Wittgenstein did not like ([1922–33] 1973: 21), so we have followed Pears and McGuinness here.

⁴⁷ Cf. *Tractatus* 3.11: 'We use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation. The method of projection is thinking the sense of the proposition.'

possible situation exist. Consider, by analogy, a painting. A painting essentially contains the *possibility* of representing a certain scene and does represent a scene by our using it as such. However, the scene itself is contained within neither the paint on the canvas nor the painted canvas together with the correlations between its regions and reality. Nor again does our treating the latter as a picture bring the scene into existence. In the same way, says Wittgenstein, propositions express their sense only when used as pictures, and using them as pictures does not render them true.

This, then, is Wittgenstein's response to *Falsity*. It also contains part of his answer to *Representation*. The question *Representation* asks is how it is that propositions represent the world as being a certain way. The short answer is that they do not: they do not themselves contain the sense which they can be used to express. This fact marks a very important difference between his position and Frege's (and Russell's). Indeed on most conceptions of propositions, propositions are entities that are 'intrinsically representational'. It is interesting, then, that Wittgenstein's treatment of propositions, one of the main goals of which was to avoid the problems of unity, involved abandoning this common presumption. It is especially interesting given that two of the most recent attempts to account for the unity of propositions (and in particular the problem of representation) make just the same move.⁴⁸

To begin to see what pushed Wittgenstein in this direction, notice that the question of *Unity*, like that of *Representation*, also can only be asked derivatively of Wittgenstein's view. Propositions are not really unities, at least not in the sense that facts, objects, or people presumably are, since they are propositional signs in a projective relation to reality. That said, we can still ask how it is possible for propositions to be used to represent anything and how, in fact, they are so used. And, as we will now see, although Wittgenstein gave no answer to the latter question, his answer to the former implies that the question of *Unity* arises once more, though this time applied to propositional signs.

7. Propositional signs are facts

The link between *Unity* and *Representation* for Wittgenstein is this. Although propositions as such are not unities, propositional signs are—they are facts. (We should notice that in the 3.14s, Wittgenstein repeatedly says that propositional signs are facts, without ever saying, despite ample opportunity to do so, that propositions are facts.) That is, in elementary propositions, names are the constituents of the propositional sign, and these names are arranged to make a fact.

3.14 What constitutes a propositional sign is that in it its elements (the words) stand in a determinate relation to one another.

A propositional sign is a fact.

Moreover.

3.142 Only facts can express a sense, a set of names cannot. 49

Part of the reason Wittgenstein thinks that only facts can represent can be gleaned from an important remark he gives in elaboration.

3.1432 Not: 'The complex sign "aRb" says that a stands to b in the relation R'; but rather: that 'a' stands in a certain relation to 'b' says that aRb.

The importance of this last remark becomes clear when we consider why it is that a set of names cannot represent. On their own, a collection of names, even if some of the names are thought of as names for properties or relations, do not tell us what is being predicated of what, or what things are being related in what order. In short, the questions surrounding the unity of propositions are precisely questions about how a proposition differs from a collection of names. Wittgenstein's key insight, expressed so succinctly by 3.1432, was that names can form a propositional sign which is able to represent, by virtue of the fact that they are made to stand in certain relations to each other. To take a simple example, the fact that 'John' is placed on a page to the left of 'Mary' can be used to represent the situation that John is to the left of Mary, or that John loves Mary, or indeed indefinitely many other situations depending on the conventions we choose. The possibility of our using propositional signs as pictures relies on our setting up correlations

⁴⁹ One could well write 'Name' rather than 'name' to emphasize that for Wittgenstein these are not names in any ordinary sense of the word (and ditto for 'object'). Cf. Tractatus 3.2-3.203.

between names and objects, and also setting up conventions about how the relations between names are to be understood.⁵⁰ The establishment of these conventions makes the difference between a mere list of names and an expression which, at the level of signs, is identical with the list, but, at the level of symbols, *says* something.

Propositional signs can represent, therefore, because they are projectible onto possible situations with which they will share a form. And they are projectible because they are unities of a certain kind, namely facts. This is one connection between Unity and Representation. Another connection we mentioned in discussing Frege was that granting the presumption behind Unity, namely that propositions are unities, makes answering Representation more difficult. For, as the author's original title of 'How Can We Say Something?' (Sainsbury 1996) wittily makes clear, it is hard to see how a thing can, on its own, have representational properties or be representational content. Unified things seem inert, incapable of themselves representing. We thus seem caught in a bind. If Wittgenstein is right, then only facts are capable of bearing the appropriate representational properties. But at the same time, unities seem unsuited to having those properties. Wittgenstein's solution is to insist that the vehicles of representation, namely propositional signs—and so, derivatively, propositions—are unities, but argue that these unities have representational properties only because of the way we use them, that is, as pictures. This solution owes us an account of what it is to use propositions as pictures, but this burden is no greater than the burden carried by those who treat propositions as intrinsically representational, since they, too, need an account of how it is that sentences come to express the propositions they do.51

⁵⁰ There are difficult interpretative questions about whether 3.1432 and other remarks imply that Wittgenstein thought that predicates and relations are not objects and hence not represented by names. We have tried to remain neutral on this. Potter (2009: 232–3) is adamant that for Wittgenstein relational expressions are names of objects, and these objects are relations. But the crucial point is made by Potter himself (2009: 113):

[In 'aRb'] what is expressive is not the complex consisting of the three signs, but a fact about this complex, namely that in it the sign 'R' occurs with something to the left of it and something else to the right of it. The sign 'R' functions only as a label to distinguish this relationship between the names 'a' and 'b' from other possible relationships.

This is absolutely right. And it allows a very generous conception of *name*. For example, consider the difference between ' $x^y = z$ ' and 'xy = z'.

⁵¹ Wittgenstein did not himself offer an answer to this problem since an answer to it is irrelevant to logic. Stevens (2005: 9, 119–26) argues that in 1919 Russell changed his account of propositions from the

Wittgenstein's move to deny that propositions are themselves unities which are intrinsically representational may be one of his great contributions to philosophy. For his account, if it works (or can be made to work), neatly dissolves that nest of problems expressed by *Unity*, *Representation*, and *Falsity*. And even if it does not (and cannot be made to) work, one can nevertheless justifiably be awestruck by the utter simplicity and unparalleled definess of his attack on these problems.

8. The unity of facts

Whether the Tractarian account of propositions is ultimately successful obviously depends on whether Wittgenstein has a coherent explanation of the unity of propositional signs. As we have seen, he claims that these signs are facts which are constituted by names standing in determinate relations to each other. To understand his account of the unity of propositional signs, we therefore need to understand his account of the unity of facts.

His account of facts can partly be gleaned from the following remarks:

- 2.03 In an atomic fact objects hang one in another, like the links of a chain.⁵²
- 2.031 In an atomic fact objects stand in a determinate relation to one another.
- 2.032 The way in which objects hang together in an atomic fact is the structure of the atomic fact.
- 2.033 The form is the possibility of the structure.

Also salient is Wittgenstein's comment to Ogden about a proposed translation of 2.03:

Here instead of 'hang one on another' it should be 'hang one in another' as the links of a chain *do*! The meaning is that *there isn't anything third* that connects the links but that the links *themselves* make connexion with one another. So if 'in' in this place is English please put it there. If one would hang *on* the other they might also be glued together.⁵³

realist one we noticed at the beginning of §3 above to a pictorial one, and so at last had the possibility of a solution to the unity problem.

⁵² Ogden's translation of 'Sachverhalt' is 'atomic fact', which Wittgenstein seems to have accepted without comment. Pears and McGuinness have 'state of affairs', an unfortunate choice in the light of Ogden's having previously used it himself for 'Sachlage'.

⁵³ Wittgenstein, Letters to Ogden ([1922-33] 1973: 23).

Thus, for Wittgenstein, objects themselves, the constituents of facts, are not united by yet another thing.⁵⁴ There is no glue. Instead, each object is itself 'unsaturated' and the unity of the fact is effected by the objects themselves: each object is *defined* by its possibilities for combination into atomic facts and these possibilities are its form. When objects are combined in a definite way they make up a structure, and the form of a fact is the general type (or possibility) of the structure that is instantiated. The structure, and so the form, is not itself a constituent of the fact: the objects themselves are all the constituents there are.⁵⁵

This account of the unity of facts is easily transferred to propositional signs. In a propositional sign, names are combined in a definite way. Names each have a form—their possibilities for combination with other names—and so are one and all 'unsaturated'. The form of a propositional sign is the way in which its names are combined, but is not itself a constituent of the sign. Moreover, since the form just is the way in which the names are combined, there is no need for, and indeed no possibility of, a *name* for a form within the sign. As Bradley's regress makes plain, a mere collection of names cannot be unified by simply adding another name for some element which is meant to do the unifying. The regress can be stopped in its tracks, however, if the objects are themselves able to combine into a unity.

Thus, whereas Wittgenstein's early view of 1912–13 treated logical form as a constituent of a *proposition*, the *Tractatus* locates the form as the mode of combination of the constituent names of a *propositional sign*. Following Anscombe, we can point out the relation to Frege here by saying that for Wittgenstein the unsaturated part of the propositional sign, which for Frege was the function symbol, has become the form, which is not a constituent of the propositional sign. But doing so threatens to suggest that the names are, by contrast, saturated parts. And this is not the case.

⁵⁴ Compare Frege: '... the relation of subject to predicate is not a third thing added to the two, but it belongs to the content of the predicate...' Frege (1882: 101), quoted by Textor (2009: 62).

⁵⁵ For an interpretation of Wittgenstein's account of facts that we find broadly amenable, see Johnston (2007).

⁵⁶ This view of names as unsaturated is clearly and succinctly expressed by Linsky (1992: 265–7), who relates it to the context principle shared by Wittgenstein and Frege; the view is expounded in more detail by Palmer (1988: ch. 4).

Instead, for Wittgenstein all parts of an elementary propositional sign are unsaturated. Rejecting Frege's thought that subject–predicate sentences could be decomposed into two parts, one of which was unsaturated, the predicate, and the other of which was saturated, the name, Wittgenstein employed Frege's own context principle against him. If words have meaning only in the context of a sentence (*Satz*),⁵⁷ then each word should be thought of in terms of the contribution it makes to the sentences in which it occurs. Every word, then, every element of a propositional sign, can be defined in terms of the class of signs in which it can occur. And this means that every word is unsaturated in that it is defined by the way it combines with others.⁵⁸

Wittgenstein's account of the unity of facts, at least as we have interpreted it, may appear to face an obvious objection given the discussion in sections 2 and 3. For there we criticized Frege's account of the unity of the proposition precisely because quantified propositions apparently could be decomposed in such a way that all the constituents were unsaturated. And yet here is Wittgenstein suggesting that this is true even for elementary or atomic propositions. There is an important difference, however. The obscurity in Frege's position arose from two sources which are absent from the Tractatus: i) unsaturated entities were introduced using the paradigm of a function and yet functions do not combine with either objects or other functions to form wholes, and ii) the unity of subject–predicate propositions was explained by reference to the combination of saturated and unsaturated entities and then extended to propositions containing only unsaturated entities without further explanation. Wittgenstein does not face this problem, precisely because he explains the way objects combine to make a whole in a different way, namely with the idea that all objects are their possibilities for combination.

We also criticized Frege for not providing a full answer to *Unity*, despite apparently incurring an obligation to do so. The same objection could apparently be raised against Wittgenstein. After all, it seems, there is a difference between a collection of unsaturated entities and a unity made out of them. But Wittgenstein consistently applied Frege's context principle:

⁵⁷ Frege ([1884] 1968: x).

⁵⁸ See also Ramsey (1925b: 121–2). The point is developed at length by Gaskin (2008: §§38–42). Textor (2009) argues against Wittgenstein and Ramsey; we cannot enter this debate here.

names exist only in combination with others, in the context of sentences (to extract them is to remove their *symbolic* function, leaving only the sign, which is not itself a name); likewise, objects *cannot* float free of the situations in which they are bound to each other. *Unity* is not allowed to arise.

9. Order and combination

We have now seen how Wittgenstein intended to dissolve the problems of *Falsity*, *Unity*, and *Representation*. This leaves two others: namely *Order* and *Combination*, to the former of which Frege provided no solution at all. In both cases, Wittgenstein's solution appeals to the notion of logical form.

First, *Order*. In English, the difference between the proposition that Caesar pardoned Cicero and the proposition that Cicero pardoned Caesar, the reason they can represent different possibilities, is that the propositional signs that constitute the two propositions are different. The names 'Cicero' and 'Caesar' are differently arranged in the two signs, and so the two signs are different facts.

However, since two different propositional signs can express the same sense, this is not yet a full answer to *Order*. After all, there could be another language in which the propositional sign 'Cicero pardoned Caesar' was used to express the sense that Caesar pardoned Cicero. Moreover, according to the *Tractatus*, the essence of a proposition does not include any particular propositional sign:

- 3.34 A proposition possesses essential and accidental features.
 - Accidental features are those which are due to a particular way of producing the propositional sign. Essential features are those which alone enable the proposition to express its sense.
- 3.341 The essential in a proposition is therefore that which is common to all propositions which can express the same sense.
 - And in the same way in general the essential in a symbol is what all symbols which can fulfil the same purpose have in common.

'Symbol', Wittgenstein tells us in 3.31, is a general term for the parts of propositions (including propositions themselves) that characterize their sense. Thus what is essential to a proposition is that it can express a certain

sense, and that essence can be shared by different propositional signs when put to the same symbolic use, so that what is essential is what 'all symbols which can fulfil the same purpose have in common'.

An example will help. If we are to have a symbol which is to 'fulfil the purpose' of allowing us to assert that one person pardoned another, it must be correlated with the (non-symmetrical) pardoning relation in a way that determines which person is being said to pardon which. A correlation of the sign that functioned like a symbol for a symmetrical relation would simply not serve the same purpose. So part of any proposition that can express the appropriate sense is that the names will be arranged in some conventional way that determines who is pardoning whom. Therefore, two signs used to represent the pardoning relation running in different directions will have different logical forms, and the resulting propositions will have different structures.

Now let us turn to *Combination*. This, recall, consists of two questions: (i) Why can only some constituents be combined to make propositions at all? (ii) Why can these constituents be combined only in some ways? Wittgenstein cannot appeal to Frege's answer to these questions, since for him, unlike Frege, names are one and all unsaturated, and he is explicit that unsaturated entities can be combined into unities without the need for a saturated one. Why, then, can we not combine just any names in any way to make a unity?

The short answer to this question is obvious. Wittgenstein's position leaves open the possibility that entities are unsaturated in different ways. For their unsaturatedness is simply their possibilities for combining with other names to make unities. Names can therefore come in different forms which, like the valencies of chemical elements, determine which other names they can combine with.

While this gives the spirit of Wittgenstein's resolution of the problem, we can give a more complete explanation. The question of *Combination* is often put in some such way as this: why can the entities in the collection {Bob, happiness} make a proposition, but not those in {Bob, Jane}? Now this question makes sense only for a position according to which the constituents of propositions are real-world objects, properties, and relations. For a position like Wittgenstein's it must be replaced with the question 'Why can't "Bob Jane" be a propositional sign?' And the answer is that it can. It is

merely a contingent fact that our conventional rules of syntax in English do not allow that combination. If, for example, we had conventionally assigned some suitable meaning to the fact that one name is to the left of another, then 'Bob Jane' would be a propositional sign.

Wittgenstein himself puts essentially the same point in a different way:

- 5.473 Logic must take care of itself.⁵⁹...
 - In a certain sense we cannot make mistakes in logic.
- 5.4733 Frege says: Every legitimately constructed proposition must have a sense; and I say: Every possible proposition is legitimately constructed, and if it has no sense this can only be because we have given no *meaning* to some of its constituent parts. . . .

Thus 'Socrates is identical' says nothing, because we have given *no* meaning to the word 'identical' as *adjective*. For when it occurs as a sign for identity, it symbolizes in an entirely different way—the signifying relation is a different one—therefore the two symbols also are entirely different in the two cases; the two symbols have only the sign in common, and that is only an accident.

The point here is that the possibility of a propositional sign's representing requires us to have set up a conventional syntax, which assigns a significance to the ways words are related to each other. Once we have settled on particular conventions, logic itself dictates the ways in which various signs can be combined. This is what Wittgenstein means when he says that the general logical form of propositions is the possible ways in which names can be combined. It also explains why logic takes care of itself: in order to put a propositional sign together that expressed a nonsensical sense, we would have to create a sign with an impossible logical form. Since this is impossible, our attempts to do so end up saying nothing. For example, if we take a sign which we normally use as a proper name and put it into adjectival position then we have made a propositional sign with no sense until we assign that sign a meaning when used as an adjective.

On the Tractarian account, therefore, it is logical form, the condition of the possibility of representation, that guarantees the impossibility of nonsensical combinations of symbols.

⁵⁹ This was also Wittgenstein's first entry in the *Notebooks* (28.8.14).

10. Quantification and logical form

One of the lessons we can learn from comparing Wittgenstein's account of propositions with Frege's is that the Tractarian account owed much to Frege, and often where Wittgenstein departed from Frege he was usually led to do so by following principles that Frege himself laid down but did not adhere to strictly. One such case is Wittgenstein's extension of Frege's idea that some constituents of propositions are unsaturated to all constituents of propositions (and of facts). Despite what we said at the end of section 3, it might seem odd at first glance, therefore, that he did not adopt Frege's account of quantified propositions, for he was unlikely to share the concern we mentioned earlier, that these propositions contain nothing but unsaturated constituents. Yet Wittgenstein had several other, Fregean reasons for refusing to follow Frege.

It was a crucial consequence of Frege's solution to the unity problem that certain things are inexpressible in language. In particular, it is impossible to talk about those elements of a proposition responsible for its unity. When we attempt to refer to these unsaturated constituents we end up referring to some saturated 'proxy'. Now, since Wittgenstein thought all constituents of facts were unsaturated, he did not say that we could not name unsaturated things: the constituents of facts must be nameable for his account to work. (Nevertheless, he maintained the Fregean idea that only unsaturated expressions can stand for unsaturated things, since names are unsaturated.) What cannot be named, for Wittgenstein, was the logical form of facts. In fact, logical form, whether of facts or propositions, can, famously, only be shown and never named or represented.

His reasons for this claim are notoriously obscure. But here is a brief sketch of a plausible train of thought. In order to represent logical form we must be able to make a picture of it. Since we use pictures to represent possible situations and forms are not possible situations, we cannot make a picture of a form. The only alternative is that we could make a picture which represents the form as being a certain way by naming the form. Now, adapting Frege's context principle to Wittgenstein's terminology, names

⁶⁰ Just as Wittgenstein often out-Freged Frege in dealing with the unity of the proposition, he can also be seen as out-Russelling Russell (see Klement (2002: 34)). We see no point in trying to decide whether Wittgenstein was ultimately more Fregean or more Russellian.

have meaning only in the context of a propositional sign. So, since a proposition is a propositional sign in its projective relation to the world, there must be a proposition in which such a name could occur. And, according to the picture theory, for such a proposition to be true, there would need to be a fact which contains some thing, the logical form, as a constituent. Yet Wittgenstein's position relies on forms not being possible constituents of facts: they are instead the mode of combination of the objects which are the constituents of facts. Therefore, we cannot name logical forms.

This result has two significant consequences. The first, Fregean, consequence is that we cannot make meaningful assertions using what Wittgenstein called formal concepts, such as 'object', 'function', 'property', 'relation', and so on.⁶¹ These formal concepts are the tools with which we might represent logical forms and so they too are off limits. Likewise, and secondly, part of not being able to represent logical form is that we cannot represent the logic of facts. Wittgenstein called this his 'fundamental idea' ('Grundgedanke').

4.0312 The possibility of propositions is based upon the principle of the representation of objects by signs. My fundamental idea is that the 'logical constants' do not represent; that the *logic* of facts cannot be represented.

This means that, unlike Frege, for Wittgenstein truth-functions are not the referents of our truth-functional connectives. Moreover, it means that quantified propositions do not contain representatives for second-order concepts, and so Frege's account of them is not available.

When Wittgenstein does mention Frege's account of quantification, however, he criticizes it for an apparently different, and rather opaque, reason.

5.521 I dissociate the concept *all* from truth-functions. Frege and Russell introduced generality in association with logical product or logical sum. This made it difficult to understand the propositions ' $(\exists x).fx$ ' and '(x).fx', in which both ideas are embedded.

This criticism of Frege (and Russell) seems doubly unfair. For Frege seems not to have done what he is here accused of, and Wittgenstein himself in

⁶¹ Tractatus 4.12-4.128. Compare Notebooks 5.9.14.

5.52 appears to define quantification in terms of truth-functions, in line with his earlier remark (at 5) that all propositions are truth-functions of elementary propositions.

What Wittgenstein probably meant to focus on in this remark was the way Frege *introduces* the notion of quantification.⁶² For example, Frege says that a universally quantified proposition is one which is true whatever the argument that is substituted into the empty place left by removing the variables (when we also erase the quantifier). If Wittgenstein is right to connect the universal quantifier with a logical product, then Frege's introduction can be seen to do two things at once. It treats the quantifier as simultaneously identifying a class of propositions—those that result from putting some argument in place of the variable—and saying that all such propositions are true, that is, that their logical product is true. In short, the notions of generality and logical product are taken together.

Wittgenstein's complaint about doing this is that it obscures the nature of quantified propositions by making it difficult to see how they might be (truth-functions of) pictures. For when one introduces the two ideas together, then quantified propositions cannot be seen as saying anything about particular objects and Frege's own account, which treats them as saying something about concepts, seems inevitable. But this means that the logical notion of generality is a constituent of a proposition.

Wittgenstein's alternative account, then, separates the two ideas. As Russell pointed out in his introduction to the *Tractatus*, 63 the unique thing about Wittgenstein's treatment of quantification is that generality comes in only in order to identify a set of propositions. That is, a quantified proposition can be thought of as being arrived at by applying a series of operations. First, a propositional function, or logical prototype, is identified, such as 'fx'. An operation then tells us to consider *all* propositions of this form. Then, assuming we are universally quantifying, a truth-functional operation applies to give us the logical product of all these propositions. In this way, quantified propositions create no further 'unity' problems than the simpler molecular propositions which are more straightforwardly truth-functions of elementary propositions.

⁶² In what follows we are heavily indebted to Anscombe (1959: ch. 11) and to Fogelin (1976: ch. V).

⁶³ Tractatus: p. 14 in the Ogden translation; p. xv in Pears and McGuinness.

11. Concluding remarks

While we do not have the space to discuss them here, the account of quantification given in the Tractatus is not without its problems. Some of these may be easy enough to deal with.⁶⁴ Others can probably be avoided only by retreating to the claim that certain things cannot be expressed in language.65 Indeed, it is this feature of Wittgenstein's position, as with Frege's, that simultaneously does so much work and is so unsatisfying. It is unsatisfying not only because it can seem like a cheap way out of trouble, but also because, as Russell in his Introduction to the Tractatus pointed out—to Wittgenstein's great annoyance—'Mr Wittgenstein himself manages to say a good deal about what cannot be said.' And, he might have added, so do many other philosophers, apparently with mutual understanding. More specifically, both Wittgenstein and Frege were forced to adopt an 'Index' of terms that cannot meaningfully be used, and these terms included those for the 'formal' concepts such as 'concept', 'function', 'name', and so on. For Wittgenstein the things we try to say using these terms can only be shown, and never said. The logical positivists took this idea seriously and jettisoned a great deal of philosophy as nonsense, including not just metaphysics but even that common kind of philosophy of language in which we discuss topics like truth and reference. 66 This led them to such absurd claims as that we cannot say that a book is about Africa: instead we must say that the book contains the word 'Africa'. 67 If this is the price of Frege and Wittgenstein's approaches to the problems of unity, it seems not worth paying.

Given that 'the' problem of unity is firmly back on the philosophical agenda, and given that some are pursuing broadly Wittgensteinian approaches,⁶⁸ it is time to carefully consider the extent to which such approaches must ultimately accept something like the unsatisfying doctrines of the *Tractatus*. Our hope is that we have at least begun that task here.⁶⁹

⁶⁴ For example, Fogelin's mistaken criticism of what he calls 'the naïve constructivism of the *Tractatus*' (Fogelin 1976: ch. VI), refuted by Candlish (1978). Soames (1983) offers a solution to the technical problem Fogelin identifies.

⁶⁵ As alleged by Ramsey ([1925a] 1931: 59-60) and Anscombe (1959: 146-9).

⁶⁶ Cf. Notebooks: 6.10.14-8.10.14.

⁶⁷ Carnap (1935: 65).

⁶⁸ King (2007, 2009), Gaskin (2008, 2010), Soames (2010), and Eklund (unpubl. ms).

⁶⁹ Thanks are due to Matti Eklund and to two anonymous referees for helpful comments on earlier versions.

References

In general, we have given citations in the text using the author/date system, making exceptions where this system becomes cumbersome, unintuitive, or misleading. Such exceptions include the *Tractatus* itself, and the *Notes on Logic*. For the latter, we have used Michael Potter's edition (Potter 2009). For the former, we have generally used the Ogden translation, despite its sometimes awkwardly Germanic character, as the only one authorized by Wittgenstein himself. But we have not hesitated to follow Pears and McGuinness where their mellifluously English version was clearly superior, while in a few cases we have blended the two or made our own translation.

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Simple Objects: Complex Questions

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I

Is a point in the visual field a simple object? What is the significance of this puzzling question at the outset of Wittgenstein's 1914 notebook? To appreciate its meaning and weight we must remind ourselves that the start of that notebook on 8 August 1914 marks a decisive moment in Wittgenstein's life. After spending much time in England and Norway on his logical and philosophical problems, Wittgenstein returned to Austria as the clouds of the First World War were rolling in. With Britain's entry into the conflict, on 4 August, Wittgenstein's personal and philosophical links with Russell and Moore, which had been so important to him over the preceding years, were broken. By 8 August, he had volunteered to serve in the Austro-Hungarian army and was getting ready to fight in the war-entirely uncertain over his chances for survival. Yet he was also determined to sort out, once and for all, the problems that had preoccupied him in the previous three years. It was a make or break moment. The beginning of the 1914 notebook thus recapitulates some of Wittgenstein's most important philosophical insights and some of his most pressing questions. In the light of all this, one is forced to ask what significance he saw in his specific concern with points in the visual field.

My attention was drawn to this question when I recently re-read Hidé Ishiguro's essay 'Use and Reference of Names'. Its discussion of names and simple objects in the *Tractatus* has been of enormous importance for our understanding of Wittgenstein's early philosophy. It has impressed on me,

in particular, Wittgenstein's conviction that the notion of an object is a purely formal one, that the 'Names' of the *Tractatus* are mere 'dummy names' and that 'to ask what kind of familiar entities correspond to the objects of the *Tractatus* seems to lead us nowhere'.¹ Now, re-reading Ishiguro's essay, I still find myself in agreement with many of her conclusions though at odds with some of her arguments. What has struck me in particular is her complete lack of attention to Wittgenstein's query whether points in the visual field might count as simple objects. This is no accidental omission. Ishiguro's entire line of argumentation is based on what she calls 'the *Tractatus* theory of Names' with its focus on 'the problem of the identity of names and the problem of the use of Names in propositions'.² From this perspective questions about visual space will, indeed, seem out of place. But why then do they matter to Wittgenstein?

When he first raises the issue, Wittgenstein notes, indeed: 'Up to now I have always regarded such questions as the real philosophical ones' (p. 3).3 Months later he adds that 'as examples of the simple I always think of points of the visual field (just as parts of the visual field always come before my mind as typical composite objects)' (p. 45). Does this mean that he considered such points to be exemplary cases of simple objects? And even that only such things could be regarded as simple objects? Was he, perhaps, in agreement with the Russell of The Philosophy of Logical Atomism who thought that 'the ultimate constituents of the world' were sense data?4 That is, items like the points in our visual field with which we have direct acquaintance. A number of Wittgenstein's interpreters have, in fact, taken that line. That reading of Wittgenstein's early thought is, however, sharply at odds with Ishiguro's formalistic conception of simple objects, which rejects outright any suggestion that they might be either spatio-temporal objects or sense data. This may explain why she shies away from considering Wittgenstein's remarks on visual points. I certainly agree with Ishiguro's conclusion that a sense data conception of Wittgenstein's simple objects is untenable. But that Wittgenstein's remarks on visual points can be misinterpreted

¹ Ishiguro, 'Use and Reference of Names', pp. 45 and 47.

² Ishiguro, 'Use and Reference of Names', p. 50.

³ All plain page references are to *Notebooks 1914–1916*. I have found it necessary to change the translation at some points and these changes are marked at the appropriate places. Throughout, I have replaced Anscombe's translation of Wittgenstein's 'Satz' as 'proposition' by 'sentence'.

⁴ Bertrand Russell, 'The Philosophy of Logical Atomism', in Logic and Knowledge, p. 274.

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should not keep us from paying attention to them, particularly as it is notable that they are too prominent in Wittgenstein's thinking in the pre-*Tractatus* period and too prominent also in the place they occupy on the first pages of the 1914 notebook. Our task should be, instead, to determine the function of those remarks, if they are not meant to endorse a sense data view of simple objects.

H

The notebooks certainly give us few reasons to consider Wittgenstein a sense data theorist. That he tends to *think* of points in the visual field as examples of simple objects does surely not mean that he really takes them to be simple objects. His reflections on the topic are, in fact, shot through with all sorts of doubts. He is certainly far from assuming that such points are objects of acquaintance. Thus, he wonders whether we see all its points, when we see a space (p. 48). And, indeed, whether we see any such points at all. 'Who knows *whether* I see infinitely many points?' (p. 65). He also wonders even whether there are any such points: 'Are there parts in our visual field that have no extension?' (p. 51; translation modified). These concerns force upon him an even more radical question, which he had asked right at the start of his 1914 notebook: 'What evidence could settle a question of this sort at all?' And already at this point he concludes that there seems to be no such evidence. On the contrary: 'It looks as if I could say definitively that these questions could never be settled at all' (p. 3).

In the same period in June of 1915, in which he is writing extensively on the topic of points in the visual field, Wittgenstein is, moreover, asking himself whether his simples could not be material points. He considers the possibility that 'every spatial object consists of infinitely many points', that is, presumably, infinitely many material points (p. 62). And he concludes that 'the division of the body into material points, as we have it in physics, is nothing more than analysis into *simple components*' (p. 67). Surely, he cannot be thinking of both visual points and material points as simple objects. That he should be reflecting on the possibility of material points as simple objects throws, moreover, a new light on what he has been saying about visual points. In contrast to the latter the material ones are quite obviously only

theoretical constructs. No one would take them to be possible items of acquaintance. The concept of a material point belongs, in fact, to classical, Newtonian mechanics. For Newton, physical events are law-governed motions of material points in space. And these points are conceived as bodies of finite mass whose geometrical dimensions, locality, and 'inner' qualities can be neglected for the purpose of studying their motions. In a notebook remark incorporated into the *Tractatus*, Wittgenstein writes: 'Newtonian mechanics brings the description of the world into a unitary form... This form is arbitrary... In this way too it tells us nothing about the world that it can be described by means of Newtonian mechanics' (p. 35). Material points belong to this machinery; and they are simple objects only within the framework of Newton's theory.

The devastating implications of all this for Wittgenstein's official 'mirror' account of meaning have generally gone unnoticed. According to the official account, a sentence must be an exact mirror of the state of affairs it is about. 'What the picture must have in common with reality in order to represent it after its manner—rightly or falsely—is its form of representation', we read in the Tractatus (TLP: 2.17).5 A sentence and the state of affairs it is about must have the same logical form. But this does obviously not hold for the propositions of Newtonian mechanics. Their form is said to be arbitrary. Why then should this not also be true of all other kinds of proposition? Wittgenstein asks that question, unfortunately, only around 1930. Both in the notebooks and the Tractatus, he holds firmly on to the mirror conception of meaning, insisting that 'a proposition can express its sense only by being its logical depiction' (p. 6, translation modified). The remarks on Newtonian mechanics throw, however, an unexpected light on what he has been saying about visual points. Is it not possible that they, too, are only theoretical constructs, postulated by some theory of the nature of space and that their simplicity is also only a merely relative one, relative, that is, in this case to the language of visual imagery. How else are we to understand the insertion of the word 'theoretical' in the remark that 'it is certain—moreover—that I do not see all the parts of my theoretical visual field?' (p. 65). The word suggests that the conception of the visual field as composed of infinitely many points is a merely theoretical postulate and the

⁵ 'TLP' refers here and elsewhere to Wittgenstein, *Tractatus Logico-Philosophicus* and references will be to the numbered sections of that text.

assumption of simple visual point a claim that is relative to that theory. That would, of course, also mean that they cannot count as contenders for the simple objects for which Wittgenstein is looking.

Whatever he may be thinking about visual and material points, he has certainly not given up on the idea of absolutely simple objects. On the contrary, he remains convinced of the need to distinguish between what we take to be simple and what is really so. 'It always looks as if there were complex objects functioning as simples, and then also *really* simple ones...' (p. 69).

Ш

If Wittgenstein is not seriously entertaining the idea that visual points might be the simple objects he is looking for, then what is the point of raising the question? Going back to his remarks on visual points at the beginning of the 1914 notebook, we see that this question is for him not a free-standing issue but connected to other, similar 'such questions', other 'questions of this sort', as he puts it. He is considering the matter of visual points, he says, only because it appears to be 'simpler and more fundamental' than those others. At stake is, in fact, the entire relation of language to the world and with it the status of logic itself. Wittgenstein wants to know what the structure of our sentences reveals about the structure of the world. He wants to 'explain the relation of sentences to reality', as he had said in notes he had dictated to G. E. Moore in spring of 1914. In those notes, he had also committed himself for the first time to the mirror conception of meaning according to which the relation of language to reality is as follows: 'Its *simples* have meaning = are names of simples' (p. 112). Simple, unanalysable names must then be names of simple objects. And more generally, all the simple, unanalysable features of our sentences must reflect features of reality. The question of whether there are simple objects is thus on a par with the question, for instance, whether there are facts 'of the subject-predicate form'. Or of a relational form. The question: Are there simple objects? is connected to: 'Does the subject-predicate form exist? Does the relational form exist?' (p. 2). Of course, 'we have signs that behave like signs of the subject-predicate form, but does that mean that there really must be facts of this form?' We would

say perhaps that we have subject–predicate sentences but are uncertain about whether there are subject–predicate facts to which they correspond. And hence, again, by parallel: we have simple signs in our language but does that mean that there must be simple objects corresponding to them?

The problem is—as Wittgenstein has learned from Russell—that the apparent form of a sentence need not be its real, logical form. What may look like being of the subject-predicate form may, on analysis, turn out to be something quite different, and what looks like a simple name may, on analysis, disappear. Wittgenstein is, in fact, certain that 'in all the sentences that occur to me there occur names which, however, must disappear on further analysis' (p. 61). Only a complete logical analysis can reveal the real form of a sentence and whether what looks like a name really is one. That gets him to wonder: 'Does such a complete analysis exist?' (p. 2). Later on he will puzzle over how one would recognize a complete analysis as such, if we had one. But already at the start of his notebook he is agitated by an even more disturbing problem. Even if we had a completely analysed sentence (and recognized it as such) and it turned out to be of the subject-predicate form how would that guarantee that there is a fact of the subject-predicate form in the world? And similarly, presumably, if we had a completely analysed sentence and in it occurred a simple name, why would that show that there corresponds to it a simple object in the world? Wittgenstein notes that Russell would consider all this self-evident and comments on that happy certainty with a single, sardonic 'Ha!' (p. 3). It is clear then that the question whether the points in a visual field are simple objects is not Wittgenstein's ultimate concern in the initial pages of the 1914 notebook. What agitates him is, rather, the question of what reasons we have for accepting the mirror conception of meaning and whether we can rely on its assumed self-evidence. In contrast to Russell, he fears that such reliance 'is and always was wholly deceptive' (p. 4). If Russell were right, logic as a whole would depend on something else, something experiential, and thus on something entirely untrustworthy.

Wittgenstein sought to avoid this kind of reliance by asserting that 'logic must take care of itself' (p. 2). This declaration of what might be called a radical logicism forms the entrance gate to the entire philosophical discussion of Wittgenstein's wartime notebooks. He will return to it again and again in the course of his notebooks and it will subsequently become a decisive proposition in the *Tractatus*. But how can logic take care of itself?

How does that circumvent the need for an appeal to self-evidence? Wittgenstein goes on to say that Russell's self-evidence 'can only be dispensed with in logic if language itself prevents any logical mistake' (p. 4). He can therefore also say that 'language takes care of itself' (p. 43). And he explains this by adding: 'It must be unnecessary for me to trouble myself with language' (ibid; revised translation). But how can logic take care of itself by language doing so? Wittgenstein admits in the Tractatus that in ordinary language the same word is often used in more than one way and that different kinds of words are used, as if they were of the same sort. 'Thus there easily arise the most fundamental confusions (of which the whole of philosophy is full)' (TLP: 3.324). But he is convinced that there is a way out: 'In order to avoid these errors we must employ a symbolism which excludes them' (TLP: 3.325). We need, in other words, a symbolism that 'obeys the rules of logical grammar—of logical syntax'. Frege's and Russell's symbolism, he holds, is approximately such a language. But their symbolism is still only an approximation as long as we do not yet have simple names for simple objects, as long as our sentences are not completely analysed.

IV

How did Wittgenstein come to his preoccupation with simple objects? Its ultimate source may well have been Leibniz's 'Monadology' and, specifically, the very first section of that text where Leibniz writes: 'The monad of which we shall speak here is nothing but a simple substance, which enters into compounds. By "simple" is meant "without parts". And there must be simple substances, since there are compounds; for a compound is nothing but a collection or aggregate of simple things.' While there is no direct evidence of a substantive link between Wittgenstein and Leibniz—Wittgenstein spoke of him only once, as far as I know, in a glancing acknowledgment of his originality —there is a striking affinity between the passage just quoted and one of Wittgenstein's notebook entries: 'It seems that the idea of the SIMPLE is already found contained in that of the complex and in the idea of analysis, and in such a way that we come to this idea quite apart from any

⁶ G.W. F. Leibniz, 'Monadology', Selections, p. 533.

⁷ Ludwig Wittgenstein, Culture and Value, p. 58.

examples of simple objects, or of sentences which mention them, and we realize the existence of the simple object—a priori—as a logical necessity' (p. 60). Like Leibniz's monads they constitute moreover the substance and, as Wittgenstein puts it in the Tractatus, 'the fixed form of the world' (TLP: 2.023). This is not to deny important differences. Wittgenstein's simples are, of course, not soul substances capable of perceiving and willing. They have, indeed, no intrinsic positive qualities. 'Roughly speaking: objects are colorless' (TLP: 2.0232). And: 'Two objects of the same logical form are—apart from their external properties—only differentiated from one another in that they are different' (TLP: 2.0233). But this should not make us ignore the deep affinities between Leibniz and the early Wittgenstein. There are certainly intriguing parallels between the overall structure of Leibniz's treatise and the Tractatus. Both texts are composed as a sequence of numbered sentences; both lay out a picture of the world without little or no argument; both advance a pictorial conception of meaning; and both advance from a description of the structure of the world to reflections on ethics.

Wittgenstein may have known of Leibniz and his remark on compounds and simples from Russell's book, which quotes the initial section of the 'Monadology'. Russell himself would later acknowledge the importance of that remark for his own thoughts on the matter when he wrote in his essay 'Logical Atomism': 'I confess it seems obvious to me (as it did to Leibniz) that what is complex must be composed of simples...'9 Like Leibniz he went on to identify those simples with the substance of the world: 'It is also obvious that the logical uses of the old notion of substance... can only be applied, if at all, to simples.' By substance, he added, finally, he meant once again in agreement with Leibniz and the old Aristotelian conception something whose name 'never occurs in a proposition except as the subject or as one of the terms of a relation' (ibid.). This allowed him to say with Leibniz that the simples may have certain positive intrinsic qualities, that they are, in other words, not 'colourless' as the objects of the *Tractatus*.

Wittgenstein was certainly also familiar with Russell's discussion of complexes and simples in the *Theory of Knowledge* manuscript of 1913 that he had demolished so effectively that Russell abandoned the project. In this work, Russell had advanced a method of analysis with which he hoped to

⁸ B. Russell, The Philosophy of Leibniz, p. 100.

⁹ B. Russell, 'Logical Atomism', in Logic and Knowledge, p. 337.

understand both the nature of experience and of propositions. This dual aspect of Russell's project may well in part explain Wittgenstein's concern with both matters of experience and of logic and language in his notebooks. Russell had understood analysis in both cases as 'the discovery of the constituents and the manner of combination of a given complex'. And he had added that such an analysis 'is *complete* when we become acquainted with all the constituents and with their manner of combination, and know that there are no more constituents and that that is their manner of combination' (RTK: 119). And he had defined a term as *simple* when it has no constituents (RTK: 120). A *complete* analysis required, on his account, 'knowledge of all the constituents of whatever order' (RTK: 120). He had for that reason expressed doubts about the possibility that a complex might consist of infinitely many constituents:

It may be argued that, owing to the infinite divisibility of space and time, any sense-datum which has spatial or temporal extension must consist of an infinite number of parts. If so, these parts are necessarily imperceptible, since they must be too small for our senses. It will follow that every sense-datum which has spatial or temporal extension must be a complex of an infinite number of constituents with which we are not acquainted. Such an argument, however, involves an unduly naïve transference of infinite divisibility from physical space and time to the spaces and times of the senses. In regard to time, we have already seen how physical time can be logically constructed without assuming that a continuous duration actually consists of temporal parts. And in regard to space, it would seem that a similar construction is possible. There seems no reason to assume that, say, a uniform patch of colour occupying a small visual area must be complex; it is quite possible that the infinite divisibility of physical space results from a logical construction out of data which are not infinitely divisible. (RTK: 121–2)

It appears that Russell had entertained none of Wittgenstein's doubts about the possibility of complete analyses, about our capacity to recognize them as such, about what was indicated by an analysis coming to an end, and about whether we could ever come to know the ultimate, simple constituents. Wittgenstein's notebook entries also make clear that he was far from granting Russell's argument against the possibility of infinitely many constituents of a complex. And Wittgenstein also was not inclined to accept for certain

 $^{^{10}}$ This and other page references marked RTK refer to Bertrand Russell, *Theory of Knowledge: the 1913 Manuscript.*

that we could ever have knowledge of the ultimate constituents of our complexes.

Wittgenstein's own engagement with the theory of complexes and simples emerged in four stages. In his first philosophical piece of writing, a set of notes put together for Russell in 1913, he mentions the issue only in passing when he critiques Russell's 'complexes' for having 'the useful property of being compounded' combined with 'the agreeable property that they could be treated like "simples" (p. 100). The quotation marks in the text and the subjunctive form of the sentence suggest little identification with Russell's distinction. The topics that had occupied Russell in the Theory of Knowledge manuscript are, in fact, of little concern for Wittgenstein at this moment. He has no comment on Russell's method of analysis; and he is certainly not interested in his analysis of experience. Instead, he talks about logic and language, about definitions and 'indefinables'. These indefinables are linguistic expressions, constituent elements of sentences, not component elements of facts. 'Indefinables are of two sorts: names and forms' (p. 96). They are, furthermore, not only expressions standing for objects, that is, names, but also 'forms' such as the expression ' $(\exists x, \varphi).\varphi x$.' (p. 97). There are, finally, also 'logical indefinables' such as 'not' and 'or' (p. 99). It is also evident that he did not conceive of names as mere 'dummy names' and of things or objects as mere formal, colourless markers of the world's multiplicity. He writes that 'this error is presumably to be explained by the fact that, by employment of variables instead of the generality-sign, it comes to seem as if logic dealt with things which have been deprived of all properties except thing-hood...We forget that the indefinables of symbols only occur under the generality-sign' (p. 107). That raises the question, if Ishiguro is right in her interpretation of the Tractatus, at what point Wittgenstein came to its formalistic conception of objects. Was it when he came to see that one might describe the world completely with generalized propositions and thus without names referring to actual, concrete objects? That idea was certainly available to him early on in his 1914 notebook, when he wrote: 'Yes, the world could be completely described by completely general propositions, and hence without using any sort of other denoting signs' (p. 14). Or was it only a year later when he came around to the idea that the existence of simple objects was a logical necessity and that we could not actually identify any simple objects? Or was it finally only in the Tractatus when he came to speak of objects as colourless and as having no

external properties when considered on their own? It appears that his formal conception of names and objects matured only over a period of four years.

The second stage in Wittgenstein's thinking on the topic is to be found in notes he dictated to Moore in Norway in the spring of 1914. In them, the idea that there are simple objects is firmly linked to the picture conception of meaning, according to which 'a language which can express everything mirrors certain properties of the world by these properties which it must have' (p. 108). And this leads Wittgenstein to conclude that there is such a language: 'Its simples have meaning = are names of simples' (p. 112). He gets, however, no further than this point and makes no attempt to determine what might count as a simple name and what the named simples would be. Reflection on these topics is left to his wartime notebooks and these constitute therefore the third stage in Wittgenstein's thinking about simples. The *Tractatus*, finally, represents a concluding fourth stage in that story. With it the deconstruction of the doctrine of simple objects begins. The steps to this final act are thus: a theory of definition, a conception of the process of analysis, and a specific view of sentence meaning.

V

In his notebooks, Wittgenstein speaks of 'simple names' as well as of 'simple objects' and this is potentially confusing since the simplicity of a name is a linguistic (syntactic and semantic) property whereas that of an object a metaphysical property. The dual use of the word is justified, of course, in Wittgenstein's eyes by the mirror conception of meaning. In looking at the notebooks, we must also pay attention to the fact that Wittgenstein speaks exclusively of the components of sentences, including names, as definable or indefinable whereas he calls both verbal expressions (sentence and their components) and what they correspond to in the world 'analysierbar' (or also, indiscriminately, 'zerlegbar'). Thus we read of sentences as further analysable (zerlegbar) but also of parts of objects that 'cannot be further analyzed (die nicht mehr zerlegbar sind)' (pp. 10 and 62). It seems, moreover, that Wittgenstein is using the words 'definable' and 'analysable' as equivalent when it comes to verbal expressions but as not equivalent when we bring in objects. 'The object x is analyzable' is, in other words, not necessarily

equivalent to 'The expression standing for object x is definable.' And that a verbal expression is indefinable does not guarantee that it stands for something unanalysable and hence simple in the world—and this is for two interconnected reasons.

First of all: that A can be defined by means of B and C does not therefore show that A must be a more complex term than B and C and that the latter are simpler. We might, for instance, define Berlin as the capital of Germany but that does not mean that Germany is a component of Berlin and even less that Germany is simpler than Berlin. The same point is brought out in a different way when we consider the possibility of alternative definitions for a given term. We can, for instance, define material implication through negation and conjunction but also through negation and disjunction. Wittgenstein writes in 1913 that 'alternative indefinability shows that the indefinables have not been reached' (p. 98). I assume that he means to say that alternative definability shows that the indefinables have not been reached. He seems to be taking it for granted that when we have an ultimate set of indefinables then the various alternative definitions of a complex will collapse into one or be logically equivalent. Thus, consider a sentential logic in which the Sheffer stroke is the single indefinable logical operation. With it we can define negation, conjunction, and disjunction and then define material implication either by means of negation and conjunction or by negation and disjunction. But we will also then be able to show that those alternative definitions of material implication are logically equivalent. The problem is only that this does not settle whether the complex notion of material implication contains conjunction or disjunction as a simpler component.

A second difficulty is revealed by the fact that terms may be interdefinable. We can define material implication by means of negation and conjunction, but conjunction also by means of negation and material implication. Or, to take a non-logical example: we can define being bald as having no hair but we can also define having hair as not being bald. Which of the two notions is the simpler, the more analysed one? Which definition we will end up with, will depend on which terms we have introduced as basic, indefinable terms in our language. Definability is, for that reason, a language-relative notion. What is indefinable in one language may be definable in another one. That a name is simple in the sense of being indefinable will thus tell us nothing about the kind of object it stands for. The theory of definition can provide us only with a languagerelative notion of simplicity. Wittgenstein is not unaware of the fact that it might turn out that we have only such a relative notion. He writes in this sense: 'The simple thing for us IS: the simplest thing we are acquainted with.—The simplest thing which our analysis can attain—it need appear only as a prototype, as a variable in our sentences—that is the simplest thing that we mean and look for' (p. 47). The remark does, admittedly, not speak of definability but explains relative simplicity in terms of acquaintance and analysis and I will have to come back to this aspect of the remark. But we can surely apply the remark also to the question of definability and say that we need to recognize the possibility of a relative simplicity (relative, that is to a language) if we try to understand simplicity in terms of definability.

This suggests the possibility of a positive answer to Wittgenstein's question: 'Can we manage without simple objects in LOGIC?' (p. 46). He is, indeed, forced to admit that 'sentences are possible which contain no simple signs...And these are really sentences making sense' (p. 46). It appears, indeed, that simple names may be able to stand 'for the most various forms' (p. 59). Everything, so it seems, can be named. 'I can correlate a name with all that I see, with this landscape, with the dance of motes in the air, with all this; indeed, what should we call a name if not this?' (p. 53). It would seem even 'as if in a certain sense all names were genuine' (p. 61). We must contemplate therefore also the possibility of simple names of complex objects (pp. 52, 64, and 69).

But even so, Wittgenstein still wants to hold on to the idea that there are genuinely simple objects and that these will be named by genuinely simple names in a sufficiently analytic language. He concludes that 'in all the propositions that occur to me there occur names which, however, must disappear on further analysis' (p. 61). He considers it obvious that components of such sentences 'can be analyzed by means of a definition, and must be, if we want to approximate to the real structure of the sentence' (p. 46). That this is so, follows, however, not from the definability of those components in the language we have available but from the thought that definitions should be tracking a process of analysis and that the results of that process of analysis can be made explicit in a formal definition in another, more fully analytic, language.

VI

'Our difficulty now lies in the fact that to all appearances analyzability, or its opposite, is not reflected in language. That is to say: We can *not*, as it seems, gather from language alone whether for example there are real subject-predicate facts or not' (p. 10). That leaves us with the question of from where we are to gather the conclusion that there are real subject-predicate facts or that there are simple objects and what they are. It is at this point, I think, that Wittgenstein feels the need to look at such issues as the analysis of our visual field into visual points and that of spatial objects into material points. His hope is that these will provide us with a notion of analysis that can assure us that analysis will eventually lead to simple objects. His attention to these two model cases generates a number of important conclusions.

The first of these is that we have a notion of complexity which is independent of that of absolute simplicity. 'Even though we have no acquaintance with simple objects we do know complex objects by acquaintance, we know by acquaintance that they are complex' (p. 50). That appears at first sight to be an uncomplicated claim. But it is far from this for Wittgenstein who is committed to the idea that 'complex objects do not exist' (p. 63). Wittgenstein considers himself, instead, committed to 'treating names of complexes as propositions' and thus to an 'assimilation of complex things and facts'. Still, he is certain that both propositions and facts must be articulated and thus complex, and that this can be known directly, without having an analysis of either propositions or facts into their ultimate, simple components.

Our acquaintance with 'complex objects' provides us, secondly, with an idea of their analysis into simpler parts and thus with a relative notion of simplicity. 'When we see that our visual field is complex we also see that it consists of *simpler* parts' (p. 65). And this gives us, in turn, the idea of a 'process of analysis' that leads us in stages to increasingly simpler components. 'We single out part of our visual field, for example, and we see that it is always complex, that any part of it is still complex but is already simpler, and so on—' (p. 50).

But where will such a process end? It may possibly end up with an infinity of simple components. Here the model of the visual field and its analysis and

¹¹ Ishiguro, 'Use and Reference of Names', pp. 40 and 50.

that of spatial objects and their analysis generates an additional problem. For we imagine in these cases that the analysis would end, but end in an infinite number of (visual or material) points. But an 'infinitely complex situation seems to be a chimera' (p. 50). In a passage from which I have already quoted, Wittgenstein writes: 'Let us assume that every spatial object consists of infinitely many points, then it is clear that I cannot mention all these by name when I speak of that object. Here then would be a case in which I cannot arrive at the complete analysis in the old sense at all; and perhaps just this is the usual case' (p. 62). Against the possibility that any statement about a complex object would have to be analysed into an infinitely complex sentence stands Wittgenstein's conviction that 'the meaning of our sentences is not infinitely complicated' (p. 46). He seeks to resolve the problem by suggesting that when we have a sentence about a complex 'then infinitely many sentences of different content follow LOGICALLY from that first one' (p. 64). The complexity of the sentence about the complex thing would thus show itself not in its syntactic structure, which would presumably be finite, but in its logical implications or, more broadly speaking in 'its syntactical application' (ibid.). But that would, of course, mean that Wittgenstein has abandoned the idea that the structure of the world is mirrored in the structure of our language. A step he is not ready to take at this point.

Finally, the two model cases of analysis of the visual and of extended bodies make it evident that we do not, in fact, have analyses that lead from complexes to simples. And since Wittgenstein cannot present us with a single case of an actually completed analysis, he is forced to argue that it 'seems certain that we do not infer the existence of simple objects from the existence of particular objects, but rather know them . . . as the final outcome of analysis, by means of the process that leads to them' (p. 50; translation modified). There remains the question why we should assume that the process of analysis has such a terminal point. Could it not go on indefinitely? 'Is it, a priori, clear that in analyzing we must arrive at simple components—is this, e.g., contained in the concept of analysis—, or is analysis ad infinitum possible?' (p. 62).

VII

The only reason for accepting the claim that there must be such simple objects is that otherwise certain compelling philosophical truths cannot

hold. And on this point Wittgenstein is emphatic. Again and again 'it keeps forcing itself upon us that there is some simple indivisible, an element of being, in brief a thing' (p. 62). And immediately following this he writes that 'we feel that the WORLD must consist of elements. . . . The world must be what it is, it must be definite . . . It looks as if to deny things were as much as to say that the world can, as it were, be indefinite in some such sense as that in which our knowledge is uncertain and indefinite. The world has a fixed structure' (p. 62). But why should such feelings be reliable? What forces us to say that the world must have a fixed structure? If we had a completely analytic language in which we could depict the world completely and exactly and if we could be sure that the structure of such a language would mirror the structure of reality, we would, indeed, have grounds for speaking about simple objects.

But we do not actually possess such a language, only an approximation to one, and no certainty that the process of approximation will ever come to an end. If we had such a language then it would show by itself what the structure of our reality is like. Our language would then take care of itself. Meanwhile, however, we can only repeat over and over again that the structure of such a language *must* mirror reality. And the problem is that 'we can only foresee what we ourselves construct. But then where is the concept of a simple object still to be found?' (p. 71). Wittgenstein keeps hammering away at this point, but the more he repeats it, the clearer and clearer it becomes that he is falling back on that self-evidence he had rejected. And, with respect to this, he had already made the decisive judgement that 'all theories that say: "This is how it must be, otherwise we could not philosophize" or "otherwise we surely could not live", etc. etc. must of course disappear' (p. 44). In consequence: 'It keeps looking as if the question "Are there simple things?" made sense. And surely this question must be nonsense' (p. 45).

VIII

We can see then that Wittgenstein's notebooks already contained everything necessary for the destruction of the theory of simple objects and of the whole edifice to which it belongs. In her essay, Ishiguro writes in a somewhat different tone that the concept of a simple object 'was a logical requisite for the Tractatus theory, and followed from the combination of a basically correct theory about names, of a mistaken assimilation of complex things and facts, and of a wrong and unnecessary claim about the independence of elementary propositions' which Wittgenstein abandoned 'in later years'. 12 I have sought to lay out a number of other reasons for Wittgenstein's attachment to simple objects. In my account, the doctrine of the logical independence of elementary propositions plays no particular part. In contrast to Ishiguro who does not speculate on what motivated Wittgenstein to abandon the doctrine of simple objects, my story maintains that those reasons were already built into that doctrine itself. Because of this, reverberations of critical doubts can already be felt in the notebooks themselves and spread from there into the text of the Tractatus. How else are we to explain the peculiar arrangement of the Tractatus which proceeds from the dogmatic assertion of the doctrine of simple objects and its accompanying metaphysics to the conclusion that those assertions are strictly meaningless.

There is, no doubt, a strong intuitive appeal to Leibniz's idea that complexity implies simplicity, that we are justified in postulating simples (as a logical necessity) because we know of complex things. But, instead of taking the intuitive appeal of this kind of reason to be decisive, we should follow the later Wittgenstein and ask ourselves first of all from where that intuition draws its strength. We discover then that it has its source in three observations. The first is that we can always imagine smaller and smaller parts of our visual field; the second is that we can always break extended physical objects down into smaller bits; and the third is that we can always analyse our sentences into constituent terms. But none of these three observations is sufficient to establish the existence of absolute simples. The first two observations give us only the comparative notion of more or less complex, more or less simple or, alternatively speaking, that of simplicity relative to our theory and language. And the third gets us to absolute simples only by introducing the further assumption that a completely analysed sentence must be a mirror image of what it talks about and that to the absolutely and logically simple constituents of such a sentence there must correspond absolutely and logically simple objects in the world. But this

¹² Ishiguro, 'Use and Reference of Names', p. 50.

assumption fails on two counts. The first is that the notion of complete analysis is obscure and that we have no way of identifying or recognizing an analysis as such, and the second is that the idea of language as a mirror of reality is a metaphor that cannot be cashed in. To be more precise, it is an idea that is grounded in the conviction that logic and language must take care of themselves, which, in turn, is only a metaphor, though one deeply engraved in the history of our thought. And here we want to say with the later Wittgenstein: 'A metaphor that has been integrated into the forms of our language creates a false glitter; this alarms us: "But it isn't this way!"—we say. "But it must be *like this!"* . . . A *picture* held us captive.' (The picture, that is, of the sentence as a picture of a state of affairs.) 'And we could not get out, for it lodged in our language—which seemed to recall it to us relentlessly' (PI: 112 and 115).13

I hope to have shown that Wittgenstein's doctrine of simple objects was built on a wide range of considerations and was not just rooted in a 'wrong and unnecessary claim about the independence of elementary propositions', as Ishiguro has it. Looking at her essay now, I am not even sure how she meant to argue for that view. She is right, of course, in observing that Wittgenstein came to abandon the doctrine of simple objects at the same time at which he gave up on the claim of the logical independence of elementary propositions. But that was a moment when much else was also undergoing change in Wittgenstein's thinking. I have argued, of course, that the failure of the doctrine of simple objects was built into that doctrine from its inception and that its deconstruction is already apparent in the final passages of the Tractatus. The official demise came, however, only around 1930 when the entire edifice of the Tractatus was coming undone for Wittgenstein. Of the greatest importance in that process was Wittgenstein's new insight that 'if we had to name anything which is the life of the sign, we should have to say that it was its use'.14 Seeking to emphasize the unity of Wittgenstein's thought, Ishiguro has insisted that 'the main difference between the Tractatus and the Philosophical Investigations is not the presence or absence of the "use" concept but that the Tractatus conception of "use" is much less comprehensive than in the Investigations'.15 That seems to me,

¹³ Ludwig Wittgenstein, Philosophical Investigations. References to this text will be identified as PI and are to the numbered sections of the text.

¹⁴ Ludwig Wittgenstein, The Blue and Brown Books, p. 4.

¹⁵ Ishiguro, 'Use and Reference of Names', p. 21.

however, an inadequate characterization of the changes that Wittgenstein's thinking about language underwent after 1930. Ishiguro is, of course, right in emphasizing that Wittgenstein subscribed to the Fregean principle that words have meaning only in the context of a sentence in both the Tractatus and in the Philosophical Investigations. She is certainly right in saying that without his adherence to that principle, his formalistic conception of objects would have been impossible. But for all that, Wittgenstein's conception of use in his later philosophy is not just more comprehensive, it is substantially different and at odds with its conception in the Tractatus. In Wittgenstein's early thinking, language is a means of representation; in his later thought it is, above all, a means of communication. Language has for him now a social foundation and a social function. This implies that two speakers must be able to identify the object they are talking about when using a name. When the builders in Wittgenstein's language game 2 in the Philosophical Investigations, for instance, use the words 'block', 'pillar', and 'slab', they are not talking about postulated simple objects, the colourless, fixed substance of the world, but about ordinary things right in front of them that they can see, point to, and carry. The idea that, unbeknownst to its users, language could be referring to absolute simples has no place in this line of thinking.

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Reference, Simplicity, and Necessary Existence in the Tractatus*

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1. Introduction

In the *Philosophical Investigations* (Wittgenstein 2001), Wittgenstein puts forward the following account of the motivation of those who treat the word 'this' as a name:

§39 But why does it occur to one to want to make precisely this word into a name, when it is evidently *not* a name?—That is just the reason. For one is tempted to make an objection against what is ordinarily called a name. It may be put like this: a *name ought really to signify a simple*. And for this one might perhaps give the following reasons: The word 'Excalibur', say, is a proper name in the ordinary sense. The sword Excalibur consists of parts combined in a particular way. If they are combined differently Excalibur does not exist. But it is clear that the sentence 'Excalibur has a sharp blade' makes *sense* whether Excalibur is still whole or is broken up. But if 'Excalibur' is the name of an object, this object no longer exists when Excalibur is broken in pieces; and as no object would then correspond to the name it would have no meaning. But then the sentence 'Excalibur has a sharp blade' would contain a word that had no meaning, and hence the sentence would be nonsense. But it does make sense; so there must be something corresponding to the words of

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which it consists. So the word 'Excalibur' must disappear when the sense is analysed and its place be taken by words which name simples. It will be reasonable to call these words the real names.

This passage contains an argument for the conclusion that there have to be simple objects, and propositional constituents that refer to them. I shall refer to it as the Empty-Name Argument, as it is based on the unacceptable consequences of the possibility that the referent of a name goes out of existence.

This passage occurs in the sections of the Investigations in which Wittgenstein is generally engaged in criticizing the Augustinian picture of meaning, and he unquestionably saw his own Tractatus Logico-Philosophicus¹ as an instance of the Augustinian picture. Indeed many leading interpreters of the Tractatus accept that the book advances a version of the Empty-Name Argument.² More specifically, the following sections of the Tractatus (call them the substance passage) are widely read as expressing a version of the argument:

- 2.0211 If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.
- 2.0212 In that case we could not sketch any picture of the world (true or false).

This chapter has two goals. One is to argue that there is no good reason for thinking that the Tractatus puts forward a version of the Empty-Name Argument, and, in particular, that the substance passage should not be read in this way. The second is to provide an alternative reading of the substance passage. As we shall see, the two goals are closely related, as the availability of an alternative reading of this passage removes the most compelling reason for thinking that the *Tractatus* puts forward the Empty-Name Argument.

2. The sense of propositions and the reference of names

In order to consider how the Empty-Name Argument might fit in the overall argumentative structure of the Tractatus, we need to provide a sketch of the

¹ Wittgenstein (2000). I follow this translation, quoting by section number.

² See Black 1964: 61–2; Griffin 1964: 66–7; Anscombe 1971: 46–50; Kenny 1973: 77–8; Fogelin 1987: 14-15; Pears 1987: vol. I, 70-8; Proops 2004: passim. The reading is already adumbrated in Russell's introduction to the Tractatus (Wittgenstein 2000: xiii).

Tractarian account of how propositions obtain their senses. The sense of a proposition, according to the Tractatus, is 'its agreement and disagreement with possibilities of existence and non-existence of states of affairs' (4.2). It arises, through truth-functional combination, from the senses of elementary propositions.³ These result, in turn, from pairing each elementary proposition with a unique state of affairs, with whose existence the proposition agrees and with whose non-existence the proposition disagrees:

- 4.21 The simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs.
- 4.25 If an elementary proposition is true, the state of affairs exists: if an elementary proposition is false, the state of affairs does not exist.

A state of affairs is a combination of objects, and an elementary proposition is a combination of names. On a very natural interpretation of the *Tractatus*, each elementary proposition is paired with the state of affairs that determines its sense as a result of a mapping between names and objects. ⁴ An elementary proposition is paired with the state of affairs in which the images under the mapping of the names of the proposition are combined with one another in the same way in which the names are combined in the proposition. I shall refer to the mapping of names onto constituents of states of affairs that plays this role as the proxy mapping.5

- ³ Cf. Tractatus 5.2341: 'The sense of a truth-function of p is a function of the sense of p.'
- ⁴ The claim that name—object pairings are prior to proposition—state of affairs pairings has been called into question by some interpreters of the Tractatus. See Ishiguro (1969) and McGuinness (1981). I will not be concerned with their views in this chapter, although it seems to me that their approach makes the attribution of the Empty-Name Argument to the Tractatus considerably less plausible.
 - ⁵ On what I am calling proxy mapping, see 4.0312:

The possibility of propositions is based on the principle that objects have signs as their representatives.

The preceding section illustrates how a pairing of propositions with states of affairs is supposed to arise from the proxy mapping:

One name stands for one thing, another for another thing, and they are combined with one another. In this way the whole group—like a tableau vivant—presents a state of affairs. (4.0311)

The view is introduced for pictures in the 2.1s:

- 2.13 In a picture objects have the elements of the picture corresponding to them.
- 2.131 In a picture the elements of the picture are the representatives of objects.

And later on for propositions:

3.22 In a proposition, a name is the representative of an object.

Wittgenstein uses the term Vertretung for the mapping. Pears and McGuinness translate A vertritt B as A is a representative of B, and Anscombe, in her translation of the Notebooks, as A goes proxy for B (Wittgenstein 1979). It will be useful to have a concise formulation of this account of how the proxy mapping determines the sense of an elementary proposition:

Proxy Principle: The sense of an elementary proposition p is constituted by the state of affairs in which the values of the names of p under the proxy mapping are combined in the same way in which the names are combined in p.

3. The Empty-Name Argument

If the *Tractatus* advances the Empty-Name Argument, it is reasonable to suppose that its role is to support a claim concerning the values that names can receive under the proxy mapping—that these have to be simple, indivisible constituents of states of affairs.⁷ We can formulate the claim in the following way:

Simplicity Thesis: The values under the proxy mapping of the names of an elementary proposition are simple, indivisible constituents of the state of affairs that determines its sense.

Now we can formulate a version of the Empty-Name Argument that yields the Simplicity Thesis as its conclusion:

- 1. If the value that a name of a proposition actually receives under the proxy mapping did not exist, then the proposition would not have the sense that it actually has. (Premise)
- 2. Hence, if a name of a proposition received a contingently existing value under the proxy mapping, the proposition would have the sense that is has only contingently. (From 1)
- 3. But propositions cannot have senses contingently. (Premise)

⁶ This is the principle that Pears calls *Principle of Representation* (Pears 1987: vol. I, 74). He identifies it as a premise of the version of the Empty-Name Argument that he finds in the *Tractatus*.

⁷ Notice that formulating the claim in these terms does not do justice to the way in which names are actually introduced in the *Tractatus*, as the elements of the propositional sign that correspond to the objects of the thought, and consequently to the objects of the corresponding state of affairs in completely analysed propositions (see *Tractatus* 3.2–3.203; see also Wittgenstein (1971: 3.14)). On this construal of names, the claim that names refer to simples is analytic: if there were no simples there would be no names. Here I am taking names to be the arguments that the proxy mapping takes in an elementary proposition in order to determine its sense in accordance with the Proxy Principle.

- 4. Therefore the names of a proposition with sense have to receive necessarily existent values under the proxy mapping. (From 2 and 3)
- 5. But complexes exist only contingently. (Premise)
- 6. Therefore the names of a proposition with sense have to receive simple values under the proxy mapping. (From 4 and 5)

My main goal in the next three sections is to argue that there is no good reason for thinking that the Tractatus advances this argument. I am going to concentrate on the derivation of 4 from 1 and 3. I am going to argue that the version of each of 1 and 3 that can be justifiably attributed to the Tractatus would only yield 4 when combined with a version of the other premise that cannot be attributed to the Tractatus. There are no versions of 1 and 3 that can be justifiably attributed to Wittgenstein and that jointly entail 4.

4. Contingent senses

Let us start with 1. It is clear that on a straightforward reading of this premise, it is a direct consequence of the Proxy Principle. If a proposition obtains its sense by being paired with a state of affairs, and this pairing results from the names of the proposition receiving the constituents of the state of affairs as their images under the proxy mapping, then if the names of the proposition fail to receive those images under the proxy mapping the proposition will fail to be paired with that state of affairs, and it will fail to have that sense.

It is also clear that I, on this reading, entails an equally straightforward reading of 2. Suppose that the names of p receive the constituents of S as their images under the proxy mapping, and that the constituents of S exist only contingently. It follows that there are possible worlds in which the constituents of S do not exist.8 But clearly, in those worlds the names of p do not receive from the proxy mapping the images that they receive in the actual world. Hence, if the constituents of S did not exist, p would not have the sense that it actually has. Therefore, from the assumption that the names

⁸ I am not ascribing to Wittgenstein a metaphysics of possible worlds. I am only employing the idiom to provide perspicuous formulations of some ideas in this area. See Proops (2004: 110).

of p receive contingently existing images under the proxy mapping it follows that p has the sense it has only contingently, as 2 dictates.

Now, we can get from 2, on this reading, to 4, with a no less straightforward reading of 3. On the requisite reading, 3 says that if a proposition has a sense, then it has this sense necessarily. Does the *Tractatus* endorse this view? The answer depends on what we take propositions to be.

Some passages suggest a conception of propositions according to which they include, not only the combination of signs, but also the pairings of these with their images under the proxy mapping. The point is made first for pictures in general:

- 2.1513 So a picture, conceived in this way, also includes the pictorial relationship, which makes it into a picture.
- 2.1514 The pictorial relationship consists of the correlations of the picture's elements with things.

And later for propositions in particular:

- 3.12 I call the sign with which we express a thought a propositional sign.—And a proposition is a propositional sign in its projective relation to the world.
- 3.13 A proposition includes all that the projection includes, but not what is projected.[...]

Clearly, on this conception of propositions, they have their senses necessarily, since changing the image that a propositional element receives under the proxy mapping would produce a different proposition. Notice, however, that the claim that propositions, thus construed, have their senses necessarily is of no use in trying to derive 4. For if we read 2 as referring to this construal of propositions, it is obviously false. In the counterfactual situations in which the images of the names of p under the proxy mapping do not exist, p, thus construed, does not exist either. There are no situations in which p exists but it fails to have the sense it has.

This means that in order to obtain 4 from 2 and 3, we need to take 3 to refer to propositions in abstraction from the images that their names receive under the proxy mapping. It needs to refer to the fact—the combination of names—in which the proposition consists. But does the *Tractatus* propound the view that propositions, thus construed, have their senses necessarily? I think there is ample justification for answering this question in the negative. The *Tractatus* says very little about the nature of the proxy

mapping, but what it does say seems to suggest that it results from *arbitrary determinations*. I want to adduce two passages in support of this claim. In the first, Wittgenstein is discussing the familiar process of replacing propositional constituents with variables:

3.315 If we turn a constituent of a proposition into a variable, there is a class of propositions all of which are values of the resulting variable proposition. In general, this class too will be dependent on the meaning that our arbitrary conventions have given to parts of the original proposition. But if all the signs in it that have arbitrarily determined meanings are turned into variables, we shall still get a class of this kind.⁹

In the second, he is explaining the circumstances that result in a proposition that lacks sense:

5.473 Logic must look after itself.

If a sign is *possible*, then it is also capable of signifying. Whatever is possible in logic is also permitted. (The reason why 'Socrates is identical' means nothing is that there is no property called 'identical'. *The proposition is nonsensical because we have failed to make an arbitrary determination*, and not because the symbol, in itself, would be illegitimate.)¹⁰

What these passages suggest is that the pairings of propositional constituents with their images under the proxy mapping result from our arbitrary stipulations.¹¹ But this would seem to entail that propositional constituents might have been paired with other images, and in that case the proposition would have had a different sense. In sum, if the pairings of propositional constituents with their images under the proxy mapping result from arbitrary stipulations, propositions will have their senses contingently, contrary to what 3 seems to assert.

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⁹ My italics.

¹⁰ My italics. In the *Notebooks* he also speaks of 'The arbitrary correlation of thing and thing signified which is a condition of the possibility of the propositions [...]' (Wittgenstein 1979: 25).

¹¹ Notice that this claim does not entail that the stipulations concern in the first instance what names are paired with. More likely, the stipulations would concern complex signs and yield as consequences the pairings of names with their images under the proxy mapping. See, in this connection, *Tractatus* 4.002: Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is—just as people speak without knowing how the individual sounds are

I have argued in this section that, on the most straightforward reading of I, it is a thesis to which Wittgenstein would subscribe. But the thesis that 3 would need to express in order to combine with this reading of I to yield 4 is a thesis that cannot be plausibly attributed to Wittgenstein. The *Tractatus* cannot be read as advancing the version of the Empty-Name Argument that results from these readings of I and 3.

5. Exhaustive senses

Our first attempt to ascribe the Empty-Name Argument to the *Tractatus* has foundered because it requires reading 3 as expressing a claim that the *Tractatus* does not endorse. If we want to overcome this obstacle, it is reasonable to start by identifying a reading of 3 under which the *Tractatus* can be plausibly claimed to endorse it, and try to build a version of the Empty-Name Argument around this reading.

There is a claim that 3 might be taken to express which the *Tractatus* does seem to endorse. It is the claim that the sense of a proposition must determine, for every possible combination of states of affairs, whether the proposition agrees or disagrees with it—whether the combination would make the proposition true or false. We can formulate the thesis in the following terms:

3*. If a proposition has sense, then there is no possible situation that would fail to make the proposition either true or false.¹²

I think that the attribution of this claim to the *Tractatus* can receive substantial textual support. The passage usually adduced in this connection is the first paragraph of 4.023: 'A proposition must restrict reality to two alternatives: yes or no'. ¹³ In any case, I am not going to question here this attribution. I am going to assume that the *Tractatus* endorses 3* and consider

¹² For the attribution of this claim the *Tractatus*, see Proops (2004: §5).

¹³ Additional support can be obtained from some passages in the *Notebooks* concerning vague propositions, although there are clear tensions in Wittgenstein's discussion of this issue. See, e.g., the following entry from 20 June 1915:

If the proposition 'The book is on the table' has a clear sense, then I must, whatever *is the case*, be able to say whether the proposition is true or false. There could, however, very well occur *cases* in which I should not be able to say straight off whether the book is still to be called 'lying on the table'. Then—? (Wittgenstein 1979: 67)

whether we can argue on these grounds that the book puts forward a version of the Empty-Name Argument.

In order to obtain 4 with the version of the Empty-Name Argument that results from replacing 3 with 3*, we would need to revise 2 accordingly. We would need to replace it with the following claim:

2*. If the names of a proposition receive contingently existing values under the proxy mapping, then there will be possible situations that make the proposition neither true nor false.

Notice that, in spite of the superficial similarity, 2* is very different in content from 2, as we have been reading it. The consequent of 2 will be true just in case there are possible situations in which the proposition in question does not have the sense that it has in actuality. The consequent of 2*, by contrast, is not concerned with what sense, if any, the proposition would have in non-actual situations. What it is concerned with is whether there are possible situations from which the proposition, with the sense it has in actuality, would not receive a truth value. Whether a possible situation fits this description is entirely independent of what sense, if any, the proposition would have in that situation.¹⁴

A consequence of this difference in content between 2 and 2* is that, unlike 2, 2* does not follow from 1. For the purposes of the truth value of 2*, it is irrelevant what sense, if any, a proposition would have in possible situations in which the value that a name of a proposition actually receives under the proxy mapping does not exist. Even if in those situations the proposition would not have the sense it actually has, nothing follows about whether these situations would bestow a truth value on the proposition, with the sense it actually has. I is perfectly compatible with the negation of 2*

What 2* would follow from is a claim to the effect that in possible situations in which the values actually paired with the names of a proposition by the proxy mapping do not exist, the proposition, with the sense it

¹⁴ See, in this connection, Kripke's discussion of the distinction between what a name, as used in our language, would designate in counterfactual situations and what the name would designate as used in languages that people might speak, instead of ours, in counterfactual situations (Kripke 1980: 77-8). Proops invokes at this point David Kaplan's contrast between contexts of utterance and circumstances of evaluation. See Proops (2004: 114-16).

actually has, does not receive a truth value. The claim can be formulated as follows:

1*. If the value that a name of a proposition actually receives under the proxy mapping did not exist, then the proposition, with the sense it actually has, would not receive a truth value.

Hence our new attempt to attribute to the *Tractatus* a version of the Empty-Name Argument turns on whether it is possible to defend the claim that the book endorses I*. This is the question to which I now turn.

When trying to determine whether the *Tractatus* is committed to 1*, the first point to notice is that 1*, unlike 1, does not follow from the Proxy Principle. The Proxy Principle specifies how an elementary proposition is paired with the state of affairs that determines its sense. Hence it has consequences concerning whether a proposition would have, in non-actual situations, the sense that it actually has. But the principle has no direct consequences concerning how the pairing of a proposition with a state of affairs determines the truth conditions of the proposition. On this point there are two relevant alternatives. According to the first, call it the gappy account, the proposition is made true by possible situations in which the state of affairs obtains, false by situations in which the constituents of the state of affairs exist but are not combined in the requisite way, and neither true nor false by situations in which the constituents of the state of affairs do not exist. According to the second, call it the gapless account, the proposition is made true by possible situations in which the state of affairs obtains and false by all situations in which it does not obtain—by situations in which its constituents do not exist as well as by situations in which they exist but they are not combined in the right way. 15 The gappy account corresponds to 1*, but the Proxy Principle is perfectly neutral between the two accounts. The claim that the *Tractatus* is committed to the Proxy Principle cannot be invoked in support of the attribution of 1*.

Does the *Tractatus* take sides on the contest between the gappy account and the gapless account? It is undeniable that the *Tractatus* endorses a view that is strongly reminiscent of the gapless account. It is the view that

¹⁵ See in this connection Proops' distinction between gappy and gap-free modal profiles (Proops 2004: 116).

Wittgenstein expresses at 3.24: 'A proposition that mentions a complex will not be nonsensical, if the complex does not exist, but simply false.' 16

I say that this view is 'strongly reminiscent' of the gapless account because 3.24 does not mention explicitly the case in which the proposition is elementary and the complex is the image under the proxy mapping of one of its names. Clearly, if 3.24 applied to these cases as well, the *Tractatus* would be committed to the gapless account and hence opposed to 1*. Therefore, saving the attribution of 1* to the *Tractatus* requires arguing that 3.24 is not meant to apply to cases in which the proposition is elementary and the complex is the image under the proxy mapping of one of its names, and that the book is committed to treating these cases along the lines of the gappy account.

This is the line explicitly adopted by some of the leading proponents of the attribution of the Empty-Name Argument to the *Tractatus*.¹⁷ Defending this strategy would require providing support for the claim that Wittgenstein actually endorsed the gappy account, and for the corresponding limitation on the scope of 3.24. The crucial point here is that the requisite support cannot be supplied by Wittgenstein's commitment to the Proxy Principle. The Proxy Principle is as irrelevant to the scope of 3.24 as to the truth of 1*. A different line of argument is needed. Ian Proops has invoked at this point some implausible consequences of the view that elementary propositions with empty referential expressions are false, but even if his argument lends support to the truth of 1*, it does not bear in any direct way on whether the *Tractatus* is committed to it.¹⁸

Every statement about complexes can be resolved into a statement about their constituents and into the propositions that describe the complexes completely.

In the version of this passage that occurs in the *Notes on Logic*, the truth of the propositions that describe a complex completely is explicitly connected with the existence of the complex:

Every proposition which seems to be about a complex can be analysed into a proposition about its constituents and [about] the proposition which describes the complex perfectly; i.e., that proposition which is equivalent to saying the complex exists. (Wittgenstein 1979: 93)

Hence, if 'can be resolved' ($l\ddot{a}\beta t$ sich zerlegen), in 2.0201, can be read as entailing is logically equivalent to, the passage would also entail that a proposition about a complex receives the value false when the complex does not exist.

¹⁶ This view might also follow from 2.0201:

¹⁷ The strategy is due to David Pears. See Pears (1987: vol. I, 76–8). Proops, crediting Pears, adopts the same strategy. See Proops (2004: 117).

¹⁸ See Proops (2004: 125, n. 41).

I think that the attribution of 1* to the Tractatus, and the corresponding limitation of the scope of 3.24, can only receive significant support from an indirect argument concerning the interpretation of the substance passage (2.0211-2). The argument would go as follows. Suppose that the substance passage puts forward the Empty-Name Argument. It follows that the Tractatus is committed to a version of the argument. But the Tractatus is not committed to the version generated by 1 and 3, since it does not endorse 3. Hence it has to be committed to the version generated by 1* and 3*. Therefore the Tractatus is committed to 1*, and to the limitation of the scope of 3.24 that follows from it.

This argument would have considerable force if its premises were plausible. And some of its premises are indeed plausible. As I have argued, the Tractatus cannot be committed to the version of the Empty-Name Argument generated by I and 3, and the version generated by I* and 3* is the only obvious alternative. Hence, if we could defend the claim that the Tractatus advances some version of the Empty-Name Argument, this would lend support to the view that the book is committed to 1*. The line of reasoning under consideration supports the claim that the *Tractatus* advances a version of the Empty-Name Argument with the contention that this is the best way to interpret the substance passage. This exegetical claim is endorsed by many interpreters, and no serious alternative has been put forward. 19 My next goal is to argue that this reading is incorrect.

6. The Empty-Name Reading of the substance passage

Let me start by considering how the substance passage would have to be read in order to make it put forward the Empty-Name Argument. As a first approximation, we can say that it would have to be read along the following lines:

A. If the world contained no simple/necessarily existent items, then an elementary proposition would not have sense in every possible situation (it would lack sense in situations in which the images of its names under the proxy mapping did not exist). (2.0211)

¹⁹ A recent exception is Morris (2008: 39-50).

B. If an elementary proposition did not have sense in every possible situation, then the proposition would not have sense. (2.0212)

Thus, on this reading, by 'the world has substance' Wittgenstein meant that the world contains simple/necessarily existent items. And the proposition on whose truth the sense of an elementary proposition p would depend in the absence of substance is a proposition asserting the existence of the values of the names of p under the proxy mapping.²⁰

One problem with this reading is that we can only expect someone to endorse B if they are committed to 3. But we have seen that the *Tractatus* rejects 3. The *Tractatus* does seem to endorse 3*, so a reading of 2.0212 that made it follow from 3* would be much more plausible. The following reading would fit the bill:

B*. If an elementary proposition (with the sense it actually has) did not receive a truth value from every possible situation, then the proposition would not have sense.

B* is a direct consequence of 3*. Hence, since the *Tractatus* is committed to 3*, reading 2.0212 in this way would have the virtue of making the proposition express a view that its author seems to have endorsed. But reading 2.0212 in this way forces us to modify our reading of 2.0211 accordingly. It would have to be read as expressing the following view:

A*. If the world contained no simple/necessarily existent items, then an elementary proposition (with the sense it actually has) would not receive a truth value from every possible situation (it would receive no truth value from situations in which the images of its names under the proxy mapping did not exist).

But the only obvious explanation of why someone might hold A* is that they are committed to 1*.

We can now formulate in some more detail the argument that I am considering for the view that the *Tractatus* is committed to 1*. Suppose that the substance passage expresses a version of the Empty-Name Argument.

The propositions best suited for this job are 'the propositions that describe the complexes completely' mentioned in 2.0201. See n. 16, above. Another relevant passage in this connection is an entry in the *Notebooks*, dated 5 September 1914: ' ϕ (a). ϕ (b). aRb = Def ϕ [aRb]' (Wittgenstein 1979: 4).

Then 2.0212 has to be read as B*, and 2.0211 has to be read as A*. But if the *Tractatus* supports A* it also supports 1*. Therefore the *Tractatus* supports 1* and the corresponding limitation on the scope of 3.24.

It is important to appreciate the precise character of the exegetical question that we need to pose in order to assess this line of reasoning. We are not supposed to assume that the Tractatus endorses the Empty-Name Argument and then ask, on this assumption, whether the substance passage should be read as giving expression to it. We have reached a situation in which we have no independent reason for claiming that the Tractatus endorses the Empty-Name Argument. This claim will be unsupported unless we can establish that the best way to read the substance passage is as advancing the Empty-Name Argument. I am going to argue that this is not the case. I shall contend that there is a more plausible interpretation of the substance passage on which it is largely unrelated to the Empty-Name Argument.

7. Sense and truth

One crucial key to interpreting the substance passage is to understand which phenomenon Wittgenstein is referring to by 'whether a proposition had sense would depend on whether another proposition was true'. The empty-name reading of the passage is based on reading this phrase as concerning the dependence of whether a proposition has sense on whether the referential expressions that figure in it actually refer. If this is the right reading of the phrase, the claim that the substance passage puts forward the Empty-Name Argument will have some plausibility. But what evidence can be adduced in support of this reading? I think that the only available textual evidence is the following passage from the *Notes Dictated to G.E. Moore in Norway* that Pears cites in this connection:

The question whether a proposition has sense (Sinn) can never depend on the truth of another proposition about a constituent of the first. (Wittgenstein 1979: 117)

Notice that all that we might be able to conclude from this passage is that the proposition on whose truth the sense of a proposition p depends is a proposition about a constituent of p.²¹ There is no suggestion in this passage

²¹ In determining how much weight we put on the phrase 'about a constituent of the first', we cannot ignore the fact that these are dictated notes, but I shall not press this point here.

that this proposition about a constituent of p is the proposition that its referent exists. For this latter claim there is, I think, no extant textual evidence. In fact one could argue that we have substantial indirect textual evidence from the *Notebooks* against this claim. In the period between May and June 1915, when simples are among Wittgenstein's main preoccupations, he raises repeatedly the question of what would be wrong with thinking that a name signifies a complex.²² He puts forward a variety of tentative answers to this question, but nowhere does he consider an answer to the question in terms of the consequences of the complex going out of existence. Hence, while we have extensive textual evidence of the kinds of difficulties that Wittgenstein saw with treating names as referring to complexes, we have no evidence that the possibility of complexes going out of existence was one of them. It is reasonable to take this circumstance as providing indirect evidence for the conclusion that the possibility of complexes going out of existence was not one of his concerns.

But if the dependence of sense on truth is not about referents going out of existence, what is it about? I think that we can find the key to the alternative answer that I want to put forward in the following passage from the *Notebooks*, dated 21 October 1914:

I thought that the possibility of the truth of the proposition ϕ_a was tied up with the fact $(\exists x, \phi).\phi x$. But it is impossible to see why ϕ_a should only be possible if there is another proposition of the same form. ϕ_a surely does not need any precedent. (For suppose there existed only the two elementary propositions ' ϕ_a ' and ' ψ_a ' and that ' ϕ_a ' were false: Why should this proposition make sense only if ' ψ_a ' is true?). (Wittgenstein 1979: 17)

The potential relevance of this passage for the interpretation of the argument for substance is clearly flagged by its mention of the possibility that whether a proposition has sense depends on whether another proposition is true.²³ I am going to argue that this is not a coincidence: the substance passage should be interpreted in connection with the range of issues addressed in this passage from the *Notebooks*.

²² See Wittgenstein (1979: 45-71).

²³ In their critical edition of the *Tractatus*, Brian McGuinness and Joachim Schulte identify the passage from the *Notes Dictated to Moore* quoted above as a pre-Tractarian text relevant to the interpretation of 2.0211, but they do not accord the same treatment to the passage from the *Notebooks* I've just quoted (Wittgenstein 1989: 9). I think that this decision can only be justified by their acceptance of the emptyname reading of the substance passage.

The context in which the *Notebooks* passage should be understood is now familiar, thanks mainly to David Pears' pioneering work (Pears 1977, 1979). Here I shall only provide a brief outline. Since the *Principles of Mathematics*, of 1903, Russell put forward a succession of proposals concerning the analysis of judgement. In the *Principles* he proposed to analyse it as a dual relation between the judging subject and a proposition (Russell 1903: ch. 4). In 1910 and 1912 (ch. 12), he put forward an alternative analysis, according to which judgement is a multiple relation connecting the subject and the constituents of the complex on whose existence the truth value of the judgement would depend. Thus, for example, Othello's judgement that Desdemona loves Cassio would be analysed, on this account, as a complex relating Othello, Desdemona, love, and Cassio.

By 1913, Russell had convinced himself that this analysis would have to be modified, and he presented a revised proposal, as an analysis of understanding, in several chapters of a book manuscript that he was writing that year. The main innovation was the introduction of logical forms as constituents of the understanding complex:

[...] if we call the subject S, and the relating relation (of which 'understanding' is the one presupposed by all the others) U, and the objects x, R, y (taking the case of a proposition asserting a dual relation for the sake of illustration), and γ the form of dual complexes, the total complex which occurs when the subject has the relation U to the objects in question may be symbolized by

$$U(S, x, R, y, \gamma)$$
.

(Russell 1984: 115)

In the 1913 manuscript, Russell also made a proposal as to the nature of logical forms. His idea was to take as the form

[...] the fact that there are entities that make up complexes having the form in question. [...] For example, the form of all subject-predicate complexes will be the fact 'something has some predicate'; the form of all dual complexes will be 'something has some relation to something'. (Russell 1984: 114)

Concerning logical forms, thus construed, Russell made two related claims. The first is that logical forms are simple: '[...] "something has some relation to something" contains no constituent at all. [...] In a sense, it is simple, since it cannot be analyzed' (Russell 1984: 114). And again: '[...] although "something has some relation to something" is a proposition, and is true, it

is nevertheless simple' (Russell 1984: 130). The second is that they are necessarily true:

The importance of the understanding of pure form lies in its relation to the self-evidence of logical truth. For since understanding is here a direct relation of the subject to a single object, the possibility of untruth does not arise [...]. (Russell 1984: 132)

The dualism of true and false, with all its attendant distinctions, presupposes propositions, and does not arise so long as we confine ourselves to acquaintance, except, possibly, in the case of abstract logical forms; and even here there is no proper dualism, since falsehood is logically impossible in these cases. (Russell 1984: 141)

Wittgenstein's engagement with these ideas is well documented in pre-Tractarian writings. It is first manifested in the *Notes on Logic*, of 1913, and it continues in the *Notebooks*, especially in a series of entries dated from 13 October to 1 November 1914 (Wittgenstein 1979: 11–23).

In these texts, Wittgenstein gives the impression of agreeing with Russell about the need to postulate logical forms, and in construing these as fully existentially generalized propositions. However, he seems to regard Russell's claims about them—their simplicity and their necessary truth—as highly problematic. His main worry seems to be how logical forms can play their role, once we accept, as we must, that they are complex and contingent.

The contingency of the logical form of subject–predicate propositions, $(\exists x, \phi).\phi x$, is the subject matter of the entry of 21 October 1914 quoted above. Wittgenstein is concerned with the following problem. According to Russell's analysis, subject S understanding the proposition Pa is the complex U[S, P, a, $(\exists x, \phi).\phi x$]. Thus, insofar as it makes sense to speak of the proposition that S understands, it follows that $(\exists x, \phi).\phi x$ is one of its constituents. Hence the proposition would have sense (possibility of truth) only if the complex $(\exists x, \phi).\phi x$ existed. But this complex will exist only if

²⁴ For their simplicity, see *Tractatus* 5.5261: 'A fully generalized proposition, like every other proposition, is composite. (This is shown by the fact that in " $(\exists x, \phi)$. ϕx " we have to mention " ϕ " and "x" separately. They both, independently, stand in signifying relations to the world, just as is the case in ungeneralized propositions.)'

²⁵ In Russell's 1913 theory, propositions are not genuine components of understanding complexes. Cf. (Russell 1984: 109).

there is a predicate Q and an object b such that Qb is true. In this way, whether Pa has sense depends on whether another proposition (Qb, or any other proposition of that form) is true.²⁶ The point is underscored by the situation that Wittgenstein envisages in the bracketed passage at the end of the quote. If Pa and Qb were the only subject–predicate propositions, and Pa were false, then since Pa would have sense only if $(\exists x, \phi).\phi x$ existed, Pa would have sense only if Qb were true.

My proposal is that the dependence of the sense of a proposition on the truth of another, as it figures in 2.0211, has to be understood as making reference to this phenomenon. 2.0211 can then be paraphrased along the following lines: if the world had no substance, then an account of representation would have to take Russellian logical forms as constituents of representational states. But these will not exist unless some of their substitution instances obtain. Hence the meaningfulness of a representational state S will depend on the truth of proposition expressing a substitution instance of the Russellian logical form that is a constituent of S.

8. Russellian logical forms and the possibility of representation

The reading of the dependence of sense on truth presented in the preceding section provides only a partial elucidation of 2.0211. We still do not know what it is for the world to have substance or how the substance of the world would enable us to dispense with Russellian logical forms in our account of representation. But before I turn to these questions, I'd like to consider 2.0212, which has to be read now as the claim that representation would be rendered impossible by the dependence of the sense of a proposition on the truth of another generated by treating Russellian propositions as constituents of representational states.

In order to understand this claim, we need to look at Wittgenstein's reasons for thinking that Russell's appeal to logical forms would not

The complex $(\exists x, \phi).\phi x$ would also exist if Pa was true, but if a proposition acquired sense in this way, it would be incapable of being false. This point can be used to address the second of the objections that Michael Morris has raised against my reading (Morris 2008: 362). Morris is discussing a version of this material that I presented in 2007. It differs in some respect from the present version.

work. We find a clear presentation of Wittgenstein worries in the *Notebooks*, in an entry of 20 November 1914:

The reality that corresponds to the sense of the proposition can surely be nothing but its component parts, since we are surely *ignorant* of *everything* else.

If the reality consists in anything else as well, this can at any rate neither be denoted nor expressed; for in the first case it would be a further component, in the second the expression would be a proposition, for which the same problem would exist in turn as for the original one. (Wittgenstein 1979: 31)

I want to suggest that this passage should be read as arguing against the inclusion in 'the reality that corresponds to the sense of the proposition' of a specific candidate, namely Russellian logical forms. I want to concentrate on the argument presented in the second paragraph. Read as concerning logical forms, the passage contains a reductio argument against their inclusion in our account of representation. If we assume, towards a contradiction, that logical forms are involved in understanding, then they would have to be 'denoted' or 'expressed', but both horns of this dilemma are unsatisfactory.

I want to suggest that this dilemma should be understood in connection with Russell's ideas concerning how the mind relates to the world. According to Russell, mind—world relations fall in two categories—acquaintance and understanding. Acquaintance is a two-place relation between a mind and an item in the world, in which the mind becomes aware of the worldly item. Understanding produces representations that can be true or false, and its nature is explained by the multiple relation theory. My suggestion is that the denotation/expression dilemma that Wittgenstein presents corresponds to this Russellian dichotomy. To say that they can be denoted is to say that we can be acquainted with them. To say that they can be expressed is to say that we can apprehend them in episodes of understanding.

The first horn was Russell's preferred option. He thought that logical forms could be objects of acquaintance (Russell 1984: 98–101). But Wittgenstein had long been opposed to this view. It is already rejected in the *Notes on Logic*:

There is no thing which is the form of a proposition, and no name which is the name of a form. Accordingly we can also not say that a relation which in certain cases holds between things holds sometimes between forms and things. This goes against Russell's theory of judgment. (Wittgenstein 1979: 105)

We cannot bear to forms the relations that we bear to things. Denotation and acquaintance would be ruled out by this thought.

In the 20 November 1914 notebook entry that we are considering, the first horn is rejected on the grounds that it amounts to treating the logical form as an additional component of the representational complex. Wittgenstein does not tell us what might be wrong with this, but Russell himself regards this outcome as problematic:

[...] the form is not a 'thing', not another constituent along with the objects that were previously related in that form. Take, for example, 'x is α ' [...]. It might be thought that 'is', here, is a constant constituent. But this would be a mistake [...] 'is' represents merely the way in which the constituents are put together. This cannot be a new constituent, for if it were, there would have to be a new way in which it and the two other constituents are put together, and if we take this way as again a constituent, we find ourselves embarked on an endless regress. (Russell 1984: 98)

I think it would not be far-fetched to suppose that this regress is what Wittgenstein sees as the main obstacle for the first horn.

The 20 November 1914 notebook entry that we are considering gives a more explicit characterization of the difficulty that blocks the second horn. Here the problem arises from the threat of a regress. According to the position under attack, understanding requires apprehending a logical form. But if this apprehension is itself a piece of understanding, as the second horn dictates, it will also involve a logical form, which will also have to be apprehended in an episode of understanding. A regress looms. Since Wittgenstein had ruled out the first horn by 1913, I surmise that the problem he had in mind when he wrote 2.0212 was this infinite regress. This would then be what makes representation impossible if the world has no substance and Russellian logical forms have to be invoked.²⁷

²⁷ Michael Morris has complained that my reading 'cannot account for Wittgenstein's decision to explain the point of 2.0212 in terms of the notion of a picture: he could just as easily have made the point just in terms of a proposition's having no sense' (Morris 2008: 363). I am not sure how much weight we should attach to Wittgenstein's choice of words here. However, I want to suggest that my reading has the resources for accommodating Morris's point. All that's needed is to take 'In that case' ('Dann' in the original) as it occurs in 2.0212, to refer, not to the consequent of 2.0211, but to its antecedent. On my reading of what it means for the world to have substance, the problem raised by the hypothesis that the world has no substance is, precisely, that picturing becomes impossible.

9. Logical forms and falsehood

Let us go back now to 2.0211. It follows from what I have already said that, for Wittgensgtein, the fact that the world has substance is what enables us to avoid treating Russellian logical forms as constituents of representational states. This suggests that, according to Wittgenstein, the fact that the world has substance opens the possibility of an alternative solution to the problem that Russell had tried to solve by appealing to logical forms. What was this problem? This question has received several plausible answers. Here I am going to restrict myself to presenting what I regard as the correct view, without trying to compare its merits with those of other alternatives.

My proposal is that Russell introduces logical forms in his account of understanding in order to make room for the possibility of falsehood—of representing the world as being a certain way when the world is not actually like that. Falsehood comes under threat as a result of the reflection that understanding requires that the mind combines into a unit the items that we are representing as combined. The problem is to explain how the mind can effect this combination without bringing about the state of affairs that would make the representation true. Here is Russell's presentation of the problem:

Suppose we wish to understand 'A and B are similar'. It is essential that our thought should, as is said, 'unite' or 'synthesize' the two terms and the relation; but we cannot *actually* 'unite' them, since either A and B are similar, in which case they are already united, or they are dissimilar, in which case no amount of thinking can force them to become united. (Russell 1984: 116)

Russell's solution to the problem is to add logical forms to the combinations that the mind produces in episodes of understanding. The passage continues:

The process of 'uniting' which we *can* effect in thought is the process of bringing them [the two terms and the relation] into relation with the general form of dual complexes. The form being 'something and something have a certain relation', our understanding of the proposition might be expressed in the words 'something, namely A, and something, namely B, have a certain relation, namely similarity'. (Russell 1984: 116)

But how would the difficulty be solved by adding this extra constituent to the combinations formed in understanding? The answer is clearly given in the continuation of the passage:

In an actual complex, the general form is not presupposed; but when we are concerned with a proposition which may be false, and where, therefore, the actual complex is not given, we have only, as it were, the 'idea' or 'suggestion' of the terms being united in such a complex; and this, evidently, requires that the general form of the merely supposed complex should be given. (Russell 1984: 116)

What makes understanding of falsehoods possible, on this account, is that the combination that is formed by an episode of understanding is different from the combination in the world that would make it a true representation. The two combinations are different because the former, but not the latter, has a logical form among its constituents. This, I submit, is the main role that logical forms play in Russell's 1913 system.²⁸ The purpose of logical forms is to make room for falsehood. Hence, if the substance of the world enables us to avoid postulating logical forms, it has to ground Wittgenstein's alternative explanation of the possibility of falsehood.

10. Form and substance

The final clue that I want to employ for the interpretation of the substance passage is the connection between substance and form. 2.025 tells us that substance is form and content, but there can be no question that form is the leading partner.²⁹ According to 2.022, every imagined world must have a form in common with the real world. Objects constitute this form (2.023)30 as well as making up the substance of the world (2.021). The identification of substance and form is reinforced by 2.0231: 'The substance of the world can only determine a form [...]'. If we knew what form is, we would know

²⁸ This account of the role of logical forms in Russell's theory is in line with Peter Hylton's reading (Hylton 1990: 345-6). See also Candlish (1996) and Colin Johnston's chapter in the present volume.

²⁹ Content plays no further role in the passages that we are trying to interpret. I think that the tendency to interpret substance as content (what is there independently of what is the case), rather than form (possibilities of combination, see below) receives spurious support from Pears and McGuinness's translation of 'besteht' as 'subsists' in 2.04 (and of 'das Beshtehende' as 'the subsistent' at 2.027 and 2.0271). One problem with this is that it hides the connection with 'das Bestehen von Sachverhalten' at 2 and similar phrases at 2.05, 2.06, and 2.062, which they render with 'existence' and its cognates (Ogden uses cognates of 'existence' in both contexts, see Wittgenstein (1922)). McGuinness has referred, in this connection, to two different senses of 'bestehen' (McGuinness 1981). A similar point applies to their translation of 'fest' as 'unalterable' at 2.023, 2.026, 2.027, and 2.0271. Again, Ogden's 'fixed' is more neutral

³⁰ See also 2.026.

what it means for the world to have substance. And if we knew what form does, we would know why the world has to have substance.

Wittgenstein tells us what form is in the 2.03s, the set of sections immediately after the 2.02s. Form, according to 2.033, is the possibility of structure, and structure, according to 2.032, is the determinate way in which objects are connected in a state of affairs. If substance is form, then the claim that the world has substance can be formulated in the following terms:

FORM: The way in which certain objects are combined in an actually obtaining state of affairs can be a possible mode of combination for other objects, which may or may not actually be combined with one another in this way.

Let us consider next the role that FORM plays in the Tractarian system. I want to suggest that FORM is the foundation on which the picture theory is built. We can see this if we look at Wittgenstein's characterization of how pictorial representation works:

2.15 The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way.

Pictorial representation, thus understood, is possible because the way in which the elements of a picture are actually combined is a possible mode of combination for the things that are being represented as being a certain way. And this would not be so unless FORM were true of the combination of objects playing the role of a picture. Pictorial representation is possible only if FORM is true. Hence if, as I am suggesting, FORM is the content of the claim that the world has substance, then if the world did not have substance pictorial representation would not be possible.31

Let us consider now how we can connect these thoughts with what we have already said about the interpretation of 2.0211. I've argued that the fact that the world has substance is being presented as what enables us to make room for false representation without invoking Russellian logical forms.

^{31 2.022} is clearly presenting a consequence of the picture theory. We represent the world in thought as being a certain way by representing objects as combined in ways in which other objects—the components of pictures—are actually combined ('imagined' is Pears and McGuinness's translation of 'gedachte'). Pictorial representation does not allow us to represent things as combined with one another in ways other than those in which things are actually combined in the world.

Hence, if FORM is what it means for the world to have substance, FORM would have to enable us to make room for false representation. Does FORM play this role? I want to argue that this is precisely what Wittgenstein presents as the most important consequence of FORM.

Notice that FORM, when restricted to the states of affairs that play the role of pictures, is the claim that there is *pictorial form*, that is, 'the possibility that things are related to one another in the same way as the elements of the picture' (2.151). Now, in the 2.1s, and especially in the 2.2s, the point is repeatedly made that pictorial (representational) form is what enables representations to be true or false, correct or incorrect, that is, *not only* true or correct, but *also* false or incorrect.³² Two sections provide particularly explicit presentations of the point:

- 2.173 A picture represents its subject from a position outside it. (Its standpoint is its representational form.) That is why a picture represents its subject correctly or incorrectly.
- 2.22 What a picture represents it represents independently of its truth or falsity, by means of its pictorial form.

False pictures are possible because a picture does not require that objects in the world are combined in a certain way. A combination is required, as Russell thought, for representation to take place, but this is not a combination of the objects that the picture represents as being a certain way, but of the picture's constituents that go proxy for these. The objects in the world may or may not be combined with one another in the way in which the constituents of the picture are actually combined. That's why the picture can be false as well as true.

We can now provide a full interpretation of the substance passage. On my reading, 2.0211–12 are presenting the following argument:

AZ. If FORM were false, then making room for false representations would require invoking Russellian logical forms. But then the meaningfulness of a representation R would depend on the truth of another, that is, a substitution instance of the existentially generalized proposition representing the logical form of R. (2.0211)³³

³² The point is already hinted at in the parenthetical remark of 2.0212.

³³ AZ presupposes that the picture theory is the only alternative to Russell's proposal. Morris sees this as a problem for the reading (Morris 2008: 362), but it seems perfectly plausible to me to ascribe this assumption to Wittgenstein.

BZ. But we cannot provide a satisfactory account of falsehood by appeal to Russellian logical forms, as the strategy generates an infinite regress: the particular fact that would make the logical form exist would have to be understood, and for this another logical form would be required, and so on. (2.0212)

In a nutshell, what the substance passage tells us is that FORM follows from the possibility of false representation.

11. Objects

Our next item of business is to explain why substance, as I have construed the notion, is constituted by objects (2.021). This task does not pose serious difficulties. If, as I have suggested, the claim that the world has substance is FORM, then the substance of the world consists of the possibilities that objects are combined with one another in ways in which other objects are actually combined in the world. But where do these possibilities of combination reside? To this question the 2.01s give an unambiguous answer:

- It is essential to things that they should be possible constituents of states of 2.011 affairs.
- 2.012 [...] if a thing can occur in a state of affairs, the possibility of the state of affairs must be written into the thing itself.
- 2.0121 If things can occur in states of affairs, this possibility must be in them from the beginning.34
- 2.0123 If I know an object I also know all its possible occurrences in states of affairs. (Every one of these possibilities must be part of the nature of the object.) A new possibility cannot be discovered later.
- 2.0124 If all objects are given, then at the same time all possible states of affairs are also given.
- Objects contain the possibility of all situations.

If substance is form, and form consists in possibilities of combination, then only objects can provide substance, as possibilities of combination are contained in them. If substance is what I say it is, then only objects can

³⁴ See Griffin (1964: 40-1), on the interpretation of these passages. I think that a more perspicuous rendition of 2.011 would be 'It is essential to a thing that it should be a possible constituent of a state of affairs.'

contribute it. I take this connection to offer additional support for my reading. Wittgenstein tells us in the 2.02s that the substance of the world is constituted by objects. But the main message of the 2.01s is that possibilities of combination are inherent in objects. This lends plausibility to my claim that substance consists in possibilities of combination. The point can also be established through the connection between substance and form. Objects constitute the unalterable form of the world (2.023, 2.026). Objects can do this because they have form. And what is the form of an object?

2.0141 The possibility of its occurring in states of affairs is the form of an object.

This is the last proposition before the 2.02s.35

12. Simplicity

The main remaining challenge for my reading is to explain the connection between substance and simplicity:

2.021 Objects make up the substance of the world. That is why they cannot be composite.

It is clear that for Wittgenstein the role that objects play as purveyors of substance is incompatible with complexity. As we have seen, the emptyname reading has a plausible explanation of this claim, on the assumption that the existence of a composite object is always contingent. But it is not obvious why complexity is incompatible with the job of constituting the substance of the world, on my account of what this involves.

I want to present a hypothesis concerning the source of the incompatibility. My proposal is that the reason why the items that constitute the substance of the world have to be simple is that playing this role prevents them from satisfying a necessary condition for complexity. This necessary condition is given in the preceding section of the *Tractatus*:

³⁵ One point on which the reading I am recommending is superior to the empty-name reading is that it does not treat the claim that the world has substance as synonymous with the claim that there are objects. Objects can constitute the substance of the world only because they encode form.

2.0201 Every statement about complexes can be resolved into a statement about their constituents and into the propositions that describe the complexes completely.36

According to this passage, an object is not complex unless every statement about it satisfies a certain condition—being resolvable into a statement about its constituents and into the propositions that describe it completely. In other words, the impossibility of this resolution is being presented as a sufficient condition for simplicity. Hence, if statements about the items that constitute substance could not be resolved in this way we would have to conclude that these items are simple. My proposal is that this is what Wittgenstein is presenting as the reason why objects have to be simple: if an item encodes possibilities of combination, then it will not be possible to resolve a statement about it into a statement about its constituents and into the propositions that describe it completely, and it follows from this, according to 2.0201, that the item has to be simple.

Why would it not be possible to resolve in this way statements about the purveyors of substance? I think that within the framework of the picture theory we can give a plausible answer. If it is going to be possible to resolve a statement about item A into a statement about its constituents and into the propositions that describe it completely, it will have to be possible to make statements about the constituents of A. Now, according to the picture theory, making these statements would involve representing pictorially the relevant states of affairs. This requires, in turn, that the constituents of A have form—that ways in which certain items (the picture's constituents) are actually combined with one another are ways in which it is possible for the constituents of A to be combined with other items. Hence, if A could not have constituents with form, A would satisfy our sufficient condition for simplicity. Therefore, in order to show that the items that constitute the substance of the world are simple, it would suffice to show that they cannot have constituents with form. My hypothesis is that this is the line of reasoning that connects substance with simplicity. The argument has the following structure:

³⁶ In Zalabardo (2010), I have attributed to Wittgenstein a different argument for simple objects based on the thought expressed by this section.

1. If an item has constituents, then it has to be possible to make state-

ments about them.

- 2. Making a statement about an item requires that the item has form.
- 3. If an item constitutes the substance of the world, then it cannot have constituents with form.

Therefore

4. The items that constitute the substance of the world are simple.

Can this argument be plausibly attributed to Wittgenstein? His commitment to the first two premises is unquestionable. Premise I follows directly from 2.020I, whose relevance for the connection between substance and simplicity is clearly signalled by its location. And premise 2 is an immediate consequence of the picture theory. Premise 3 is more problematic. It is the claim that if an item encodes possibilities of combination it cannot have constituents with possibilities of combination. I do not think we can find textual support for the attribution of this claim to Wittgenstein. All we can do is provide an informal argument that might have made the claim seem plausible in Wittgenstein's eyes.

I think that premise 3 is fairly plausible on the assumption that the items that encode possibilities of combination are not related to one another by the . . . is a constituent of ... relation, that is, that if X and Y are two of the items that encode possibilities of combination, then X is not a constituent of Y, or a constituent of a constituent of Y, and so on. Call this the Independence Constraint. In the presence of this constraint, we can argue as follows. Let A be one of the objects that encode possibilities of combination, and let B be a constituent of A. Notice that the statements about B that we need to be able to make, according to premise 1, are not statements about complexes in which B figures as a constituent, but statements about B itself. Hence the possibilities of combination that we need in order to make the requisite statements involve combinations in which B figures independently. But which items could encode these possibilities? A and other items in which B may figure as a constituent clearly cannot encode these possibilities of independent combination. The only remaining options are B itself and the constituents of B, but both options are ruled out by the Independence Constraint, on the assumption that A is one of the items that encode possibilities of combination. Therefore B does not have form, as required by premise 3.

The only obvious way of resisting this argument for premise 3 would be to reject the Independence Constraint, but the constraint can be motivated by the need to avoid the ensuing overdetermination of possibilities. If the blade of Excalibur contains its possibilities of combination, it also contains the possibilities of combination of the sword of which it is a component part. And if the sword contains its possibilities of combination it also contains some of the possibilities of combination of its blade.³⁷ This situation may in principle give rise to conflicts between the possibilities of combination encoded in the blade and the possibilities of combination encoded in the sword. Unless we can provide a plausible explanation of how these conflicts can be ruled out, the Independence Constraint will have to be upheld.³⁸

This completes my proposal as to how to interpret the substance passage and related sections of the Tractatus. Let me close this section by outlining how the availability of this alternative to the empty-name reading affects the question, whether the Tractatus endorses the Empty-Name Argument. I have contended that the only version of the Empty-Name Argument that the Tractatus might endorse is the version generated by 1* and 3*. But there is no evidence outside the substance passage for attributing 1* to the Tractatus, and 3.24 will entail that the Tractatus rejects 1* unless it is read as not applying to cases in which the complex mentioned by the proposition is the image under the proxy mapping of a name of the proposition. Hence the attribution of the Empty-Name Argument would be unsupported unless it could be argued that the most plausible reading of the substance passage is to take it as advancing the Empty-Name Argument. But I have argued that there is a more plausible reading of the substance passage. If this is correct, we will have to conclude that the attribution of the Empty-Name Argument to the *Tractatus* is unsupported.

13. The later Wittgenstein

What are we to make then of the passages from Wittgenstein's later period that seem to suggest that he once endorsed the Empty-Name Argument?

³⁷ The same can be said for the constituents of the blade, if any.

³⁸ This argument presupposes that if B is a constituent of A, the combinations with A as a constituent can also be said to have B as a constituent, i.e. that the constituents of the constituents of a complex are also constituents of this complex.

Section 39 of the Investigations does not pose a special problem. Many aspects of the Augustinian picture are certainly not in the Tractatus. The Tractatus, after all, does not treat the word 'this' as a name. And on most interpretations it does not assign any role to ostensive definitions, a fundamental ingredient of the Augustinian picture.

Other passages from the later period pose a more formidable challenge to my interpretation. Overcoming this challenge lies beyond the scope of this chapter. Hence my conclusion should be qualified as the claim that the attribution of the Empty-Name Argument to the Tractatus receives no support from the Tractatus itself or from pre-Tractarian writings. Nevertheless, I'd like to close by tentatively suggesting a strategy that one might deploy to defend my reading from the contrary evidence that Wittgenstein's later work seems to provide.

I shall concentrate on a passage from the Philosophical Remarks in which Wittgenstein is clearly attributing the Empty-Name Argument to his former self:

What I once called 'objects', simples, were simply what I could refer to without running the risk of their possible non-existence; i.e. that for which there is neither existence nor non-existence, and that means: what we can speak about no matter what may be the case. (Wittgenstein 1975: 72)39

The extent to which this passage can lend support to the attribution of the Empty-Name Argument to the Tractatus depends on whether it should be taken as reporting a line of reasoning that he remembers rehearsing in his earlier period or as an explanation, only formulated at the time of writing, of an earlier conviction. If taken in the second way, as retrospective explanation, this passage would not provide evidence for reading the Tractatus as a whole, or any specific section in it, as advancing the argument.

I want to suggest that it would be perfectly natural to take Wittgenstein's later ascription of the Empty-Name Argument to his earlier self as retrospective explanation. The Notebooks give the distinct impression that Wittgenstein did not arrive through arguments at the thought that the sense of propositions is to be explained in terms of an immediate correlation between propositional constituents and simple objects. Rather, the thought seems to have the character of a fundamental philosophical insight that he is

struggling to support with arguments. The following entry, dated 23 May 1915, conveys the tone of his reflection on these ideas:

The feeling of the simple relation which always comes before our mind as the main ground for the assumption of 'simple objects'—haven't we got this very same feeling when we think of the relation between name and complex object? (Wittgenstein 1979: 49-50)40

The point that I am making is that, from the very beginning, Wittgenstein's reflection on why complexes cannot be referents takes the form of trying to find arguments in support of a pre-existing conviction. My suggestion is that this exercise continued after the conviction had disappeared, and that the passages from his later work in which he ascribes the Empty-Name Argument to his former self should be read as offering an explanation he had come up with only then of why he once thought that only simples could be referents, not as a record of which arguments he endorsed in his early period in support of this view.

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⁴⁰ At times he appears to accept that the view that only simples can be referents might be mistaken: When I say "x" has reference' do I have the feeling: 'it is impossible that "x" should stand for, say, this knife or this letter'? Not at all. On the contrary. (Wittgenstein 1979: 49)

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What Can You Do with the General Propositional Form?

COR A DIAMOND

Readers of Wittgenstein owe a great debt to Hidé Ishiguro, who made clear how deeply our understanding of the *Tractatus* had been shaped by unquestioned assumptions—assumptions about the metaphysical implications of the book, about the view of meaning to which Wittgenstein was committed, and about the relation between his earlier and later thought. My own debt to Hidé goes further. Some years ago, she raised devastating objections to a paper of mine in which I tried to use remarks that Wittgenstein had made about indices, in a lecture of 1934, to suggest a way of reading the *Tractatus* on 'A says that p' and 'A believes that p'. ¹ My chapter here takes up, from a somewhat different angle, the same questions, and benefits greatly from Hidé's having shown me quicksands and brambles that I have tried, this time, to steer clear of.²

1. Some problems

I begin with a question that arises when we read *TLP* 4.1272. Wittgenstein there contrasts confused philosophical uses of words for formal concepts, like *object*, with unconfused uses, which go over in a conceptual notation to the use of variables. Does he want to suggest that there are unconfused uses

¹ See Wittgenstein (1979: 110-13).

² I am also very grateful to Michael Kremer, Marie McGinn, Alice Crary, and James Conant, who generously read and commented on earlier versions of this chapter.

of the formal concept proposition, which would be represented in an adequate conceptual notation by a variable? Is there a suggestion that, just as there is a contrast between confused philosophical uses of 'object' and unconfused ordinary uses that go over to quantifier and variable, so there is a contrast between confused philosophical uses of 'proposition' and unconfused ordinary uses that go over to a variable, the variable that gives the general form of propositions? Peter Sullivan (2004) has presented an argument which implies that the answer is 'No', or at any rate 'Apparently not'. The conclusion of his argument (which he describes as non-apodictic) is that there is no way available to Wittgenstein in the Tractatus to construct a variable ranging over all propositions, and (even if he could construct it) 'no way of putting it to worthwhile use' (2004: 54). Sullivan offers a 'fallback' conclusion: even if there is a way of doing either of these things, Wittgenstein does not at all 'indicate what it might be' (ibid.). In the paragraph after the one I have just summarized, Sullivan puts his second conclusion slightly differently: in terms of Wittgenstein's being 'unconcerned to secure any object-language place' for the general-form-of-proposition variable (hereafter abbreviated as the g-variable), 'or any object-language work for it to do' (ibid.). Sullivan takes the issues here to bear especially on the tenability of 'resolute' readings of the Tractatus. But the argument is of great interest also (and independently of any commitment to any particular reading) for the further questions to which it leads. If there were nothing that could be done with the g-variable, why did Wittgenstein give it such a prominent place in the structure of his book? And Sullivan's argument implies, as I have suggested, an answer to my original questions about TLP 4.1272.

A sense I had of acute puzzlement in reading Sullivan's essay provides a starting point for me, a clue. It seemed to me obvious what sort of work the g-variable could do. So the question for me was why something seemed obvious to me, but was not (apparently) at all on the table even as a possibility, from Sullivan's point of view. Why could I not even see the supposed problem about the use of the g-variable (supposing it could be constructed)? There was plainly a fundamental disagreement between my way and Sullivan's way of seeing the question what the use might be of the g-variable. I am indebted to Michael Kremer for my understanding of how that disagreement might well depend upon a difference between Sullivan and me about a different question, namely how to understand

Wittgenstein's idea that propositions occur in other propositions only as the bases of truth-operations. I shall call this the occurrence-idea; its ascription to Wittgenstein rests on *TLP* 5.54 and 5.541:

- 5.54 In the general propositional form propositions occur in other propositions only as bases of truth-operations.
- 5.541 At first sight it looks as if it were also possible for one proposition to occur in another in a different way.

In the rest of 5.541 and in the remarks that follow, Wittgenstein argues against the apparent possibility of another sort of occurrence of propositions within other propositions. TLP 5.54 on its own appears to be consistent with allowing that propositions (which can be written in various ways) might be capable of being expressed both as the result of truth operations on elementary propositions and in some other way, where the second way made use of subsidiary propositions which were not bases of truth-operations but bases of other sorts of operations. But TLP 5.541 appears to rule out the second sort of case. I shall argue, though, that that impression is misleading, and that the second sort of case is not ruled out by anything in the *Tractatus*. There are two ways of understanding the occurrence-idea; and one's reading will affect a wide range of interpretative issues. On my way of understanding the occurrence-idea, it will turn out that there is no problem about what the use is of the g-variable; whereas on what I take to be Sullivan's view, it is totally unobvious what the use would be. It is an argument for my way of understanding the occurrence-idea that it makes what would otherwise be one more mystery about what is going on in the Tractatus quite unmysterious. On the other hand, it is clearly an argument for what I take to be Sullivan's understanding of the occurrence-idea that the passage that I have quoted is not taken to mean something different from what it appears to mean. My account has three further advantages. The first two are that it avoids what might otherwise appear to be an inconsistency in Wittgenstein's remarks about operations, and that it suggests a reading of his remarks on belief. The third advantage is that it helps us to see how the Tractatus hangs together. There are important connections between Wittgenstein's ideas about projection and his remarks about translation, about operations, and about judgement, connections which are obscured if we understand the occurrence-idea in a narrow and restricted way. And that narrow, restricted understanding of the occurrence-idea goes with a too

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simple conception of Wittgenstein's extensionalism. Although my focus will be on the question what the use might be of the g-variable, I shall have some comments at the end on Sullivan's other conclusion, namely that it is not clear that Wittgenstein has any way of constructing the variable. I shall also have to turn briefly at the end to the question what is left of the dispute about the occurrence-idea, if one follows through the argument to the point at which it undercuts, or seems to, all ways of taking the occurrence-idea.

2. Ways of understanding the occurrence-idea³

My understanding of the occurrence-idea starts from Wittgenstein's remarks about operations in the passage beginning at TLP 5.2. He says (at 5.21) that we can give prominence to internal relations between propositions by writing a proposition as the result of an operation that produces it out of other propositions, the bases of the operation. And at 5.23, he says that the operation is what has to be done to the one proposition in order to make the other out of it. My reading of this passage no doubt derives from Elizabeth Anscombe's discussion of operations, in An Introduction to Wittgenstein's Tractatus, and I shall use her example (1963: 117). The two propositions 'A is husband of B' and 'A is wife of B' stand in this internal relation: the relation in which A is said to stand to B in the one proposition is the converse of the relation in which A is said to stand to B in the other. We can bring out the internal relation by writing one of the propositions as the result of an operation on the other, an operation that changes the truthconditions to what they would be if we replace the two-term relational expression in the base proposition with an expression for the converse relation. So 'A is the wife of B' can be written as the result of an operation, which she calls 'conversion' but which I shall call 'Cnv', on 'A is the husband of B'. (As she notes, the operation can be carried out only on propositions with the same relational form.) In Anscombe's way of writing the operation, the result of carrying out the operation would be 'ACnv

³ 'Occur', in these discussions, corresponds to Wittgenstein's 'vorkommen'. I believe that there is here no issue that turns on translation, and so I shall simply take for granted that 'vorkommen' and 'occur' can be treated in the same way.

(husband of)B', but it could instead be written as "Cnv'(A is the husband of B)", which makes somewhat more obvious what nevertheless is equally true of both formulations, namely that 'A is the husband of B' occurs in the new proposition as the base of the operation Cnv.⁴ In the second formulation, the apostrophe is used, as in the Tractatus, to indicate the application of the operation to the base or bases which follow. (The example also illustrates the point that, when a proposition occurs in another as base of an operation, it is not the case that the resulting proposition says something about the base proposition.) But then there is a question: If Wittgenstein held that propositions occur in other propositions only as the bases of truth-operations, how can 'A is the husband of B' occur in a proposition as the base of an operation which is not a truth-operation? This is the big question to which I shall return. But I want to note first that the remarks in the 5.2s that I have already quoted seem to allow for all sorts of operations which are not, or at any rate do not seem to be, truth-operations, if internal relations between propositions can in general be brought out by representing one of the propositions as the result of an operation on the other. It is an internal relation between propositions, for example, that the one says of some object a what the other says of b; it is an internal relation between propositions if the one says in French what the other says in English, or if the one gives the temperature in this room in Centigrade and the other gives the temperature in this room in Fahrenheit (where one mode of writing temperature is translatable by a rule into the other). Or, again, suppose that we use the fact that 'a' stands to the left of 'b' to say that A stands in relation R to B. There is an internal relation between "a" stands to the left of "b" and 'A has R to B'. If, in all of these cases, we can bring out the internal relation by writing one of the propositions as the result of an operation on the other, we shall have a great number of different sorts of cases in which, apparently, a proposition can occur in another as the base of an operation, where the operation is not, or at any rate appears not to be, a truth-operation. And, as Michael Kremer has pointed out, TLP 4.1252 also involves a commitment

⁴ I take myself to be in disagreement with Anscombe about whether 'A is the husband of B' does occur in the resulting proposition. That is, I think Anscombe's reason for choosing the formulation with the sign for the operation attached to the relation term is connected with her wanting to avoid an apparent violation of the principle that propositions cannot occur in other propositions except as bases of truth-operations.

⁵ In the case of translations, the situation is more complicated than suggested here. See below, section 4.

to non-truth-functional operations.6 The big problem then is: is there an inconsistency in what Wittgenstein holds, since he appears to hold that propositions can occur in other propositions as the bases of all sorts of operations, including but not limited to truth-operations, and nevertheless also appears to hold that propositions occur in other propositions only as the bases of truth-operations, and (indeed) that the general form of operation is given by the general form of truth-operation? I think that Wittgenstein took there to be no inconsistency in the views about operations which he was putting forward, because he thought that the construction of propositions from other propositions by operations does not go further than the construction of propositions by truth-operations. But what exactly is meant there by 'does not go further than'? I shall have some suggestions about this, but my argument depends only on the idea that Wittgenstein held a view that might be expressed in some such way; it is not necessary for my purposes to determine exactly what the view was. Some view of the sort I have in mind is suggested at TLP 6.002, which says that, if we have the general form by which propositions can be constructed, we have the general form for what has to be done to a proposition to make another out of it. The general form for what has to be done to a proposition to make another out of it will be the general form for what has to be done to a truth-function of elementary propositions to turn it into a different truth-function of elementary propositions. It seems to me that Wittgenstein did think that propositions occurring in other propositions only as the base of operations comes to the same as propositions occurring in other propositions, in the general propositional form, only as the base of truth-operations. If some such account of his views is correct, then the claims about operations at the 5.2s (which suggest an extremely wide range of kinds of case in which a proposition can occur in another as the base of an operation) would have appeared to him to be entirely compatible with the remarks at 5.54 and 5.541 about the occurrence of propositions within other propositions. If this reading is correct, though, it means that those remarks are not nearly as confining as they look. Propositions will be able to appear in all sorts of contexts in which they do not appear to be bases of truth-operations, provided that they appear as the base of an operation. I do want to

⁶ Kremer, personal correspondence. Warren Goldfarb has also discussed this feature of the *Tractatus* in reference to 4.1252 in unpublished work.

emphasize that I am not claiming that the argument I am ascribing to Wittgenstein is sound, but only that he thought he had an argument backing up 6.01, where the operation of joint negation is taken to be adequate to provide the general form of all transitions from one proposition to another, including transitions that certainly do not appear to be manageable by joint negation or any other truth-operation. I said that there were at least two ways of understanding the occurrence-idea. The narrow understanding, which I think can be ascribed to Peter Sullivan,7 takes the occurrenceidea to imply that 'A is the husband of B' cannot occur in a proposition as the base of the Cnv operation, and in general to exclude all cases in which a proposition figures as base of an operation which on the face of it is plainly not a truth-operation; the wide understanding of the occurrence-idea allows for cases in which propositions figure in other propositions as bases of such operations as Cnv. I should add here that I do not want to claim that I have given the only way to avoid the apparent inconsistency between the remarks about operations in the 5.2s and the claim, based on 5.54 together with 5.541, that propositions can occur in other propositions only as the base of truth-operations. One could avoid the inconsistency by a reading of the 5.2s different from mine. One could (that is) see 5.2 and 5.21 as not implying that internal relations between propositions can in general be brought out by writing one of the propositions as the result of an operation that produces it out of the other. (I am indebted to Marie McGinn for making clear to me the possibility of such an approach.) While I think that there are good reasons for reading the 5.2s as I do, it would take me too far out of the way to go into details about this part of the Tractatus.8 My way of treating the apparent inconsistency fits with a solution to Sullivan's problem about what the use is of the g-variable, and also (as I shall show) with a way

⁷ See Sullivan (2004: 53), for an argument which strongly suggests that Sullivan has a restrictive understanding of the occurrence-idea. He raises the question what one can do with the g-variable, and seems to be assuming in his answer that the only sort of operation that can be applied to the unrestricted variable is a truth-operation, narrowly understood. He asks: If it is pointless to apply such an operation to it, and if it cannot play the role of argument to a function, what else can one do with it? But it is exactly that question which one can answer fairly readily if one does not have a narrow understanding of the occurrence-idea. Cf. also Sullivan (2005).

⁸ For a different way of understanding how the apparent inconsistency in Wittgenstein's remarks about operations can be avoided, see Cuter (2005). Anscombe's treatment of the Cnv operation (her writing the resulting proposition with the sign for the operation attached to a part of the original proposition) may reflect a different sort of attempt to avoid the apparent inconsistency. For more on this sort of move, see the penultimate paragraph of section 2.

of reading the difficult remarks in the *Tractatus* about 'A believes that p' and related cases. (A restrictive reading of the occurrence-idea may reflect the explicit exclusion of the occurrence of propositions in other propositions as bases of non-truth-functional operations, or alternatively a failure to see that there are three cases, not just two, that need to be thought about in connection with propositional occurrence: occurrence of a proposition as base of a truth-operation, occurrence of a proposition as argument of a function, and occurrence as base of a non-truth-functional operation. The last case may simply not be seen. I do not mean by a 'restrictive reading' one that restricts the use of the word 'occur' in talking about cases in which a proposition contains a subsidiary proposition which figures as the base of a non-truth-functional operation; a restrictive reading rules out such cases altogether, and is not concerned with whether they are to be described as cases of 'occurrence'. I return to this issue below.)

Although my argument is based only on Wittgenstein's having taken himself to have a good argument underlying 6.01 (and the idea that the operation of joint negation is adequate to provide the general form of all transitions between propositions), it may be worth a brief look at a principle on which his argument might have rested. Consider the internal relation between two propositions, 'p' and 'p.q'. If this is an internal relation, it can be written as the result of an operation on 'p'. But what exactly does that mean? Here we have a choice. We can think of a conjoin-with-'q' operation, which is carried out with 'p' as base; or we can understand the phrase 'the result of an operation on "p"' to mean the result of an operation on propositions, one of which is 'p', as bases, in which case the operation to be performed in our case would be the operation of conjunction, on the two bases, 'p' and 'q', and this would count as a case of carrying out an operation on 'p'. If 'carrying out an operation on "p" as base' is understood widely enough to allow 'p' to be merely one of the bases, not necessarily the only one, we can also understand 'successive application of an operation' so that each time the operation is carried out, the result of the previous application is one of the bases but not necessarily the only base for the next application. If we carry out successive applications of the joint-negation operation on some proposition, and if we are allowed to include in the bases of the operation, each time we carry it out, not only the result of the previous application but also one or more elementary propositions, also any result of carrying out joint negation on elementary propositions, and

also any previous result of carrying out joint negation on the base from which we started, then there will be a gain in plausibility of the idea that every operation by which one proposition (itself supposedly the result of repeated applications of joint negation to elementary propositions) can be turned into another can be represented in terms of repeated applications of joint negation. Furthermore, so far as the idea of 'repeating an operation' is meant to apply to operations that require more than one base, there must be a possibility of adding a base or bases to the result of a previous application, when the operation is described as having its previous result as the base in the next application. The principle that I am suggesting here is indeed the same principle as that used by Anscombe in laying out how the truthfunctions of 'p' and 'q' can all be generated by repeated applications of joint negation (1963: 132-5). You can get a series of the truth-functions if there is a rule specifying systematically how bases for each application of the operation are determined; Anscombe's account involves the application of such a rule. (Whatever rule is systematically used, the series can nevertheless be written, in Wittgenstein's notation, as generated by the same initial bases and the same operation of joint negation. The various possible systematic rules will differ in the order of the generated series of truth-functions of elementary propositions, but will not differ in what the members are of the series.) The conclusion I want to draw here is that the wide understanding of what is meant by 'successive applications of an operation' may be involved not only in Wittgenstein's account of how the general form of proposition is supposed to be generated, but also in his understanding of how any operation on a proposition or propositions can be expressed in terms of truth-operations. The idea would be that you can get from any place in the series of truth-functions of elementary propositions to any other place in the series by truth-operations. (If there is more than one base, each of which has a place in the series of truth-functions, we can carry out joint negation on all the bases, and we shall have as a result another truth-function of elementary propositions, with a place in the series. So, if you can get from any place in the series to any other by truth-operations, you can also get from several propositions as bases to any proposition in the series.) The principle I have appealed to here is that carrying out an operation on 'p' as base can be understood to mean carrying it out with 'p' as one of the bases, and that successive applications of an operation can involve systematic additions to the bases of the operation. An account could also be given

that dropped the Anscombean idea that the truth-functions are supposed to be generated as an ordered series. (See Marie McGinn (2006: 233-4), for the idea that the series of propositions is partially ordered.9) This paragraph is meant only to suggest that there is material in the Tractatus that could allow for an argument that any application of any operation to a proposition or propositions, turning it into another, could be expressed as the application of truth-operations to the base propositions. 10

There are two points that should be touched on briefly here, before I continue with my main argument. First, I am not suggesting that there is, for any apparently non-truth-functional operation, some series of truthfunctional operations, the application of which would give the same result as that of the non-truth-functional operation. The suggestion I am making (on Wittgenstein's behalf) is much weaker. It is that, for any particular application of some apparently non-truth-functional operation, there is some application of truth-operations which will result in the same transformation of the base or bases. There would be no expectation that the truth-operations which would do the job in the case of one application of a non-truth-functional operation (like Cnv) would be the same as those which would do the job in the case of another application of the same non-truth-functional operation. Secondly, it might be suggested that my talk of an apparent inconsistency between the 5.2s and Wittgenstein's claim that propositions can occur in other propositions only as the bases of truthoperations depends upon my gratuitously introducing the idea of propositions 'occurring in' other propositions in my account of the 5.2s. Why can we not read Wittgenstein as holding both that propositions can occur in other propositions only as the bases of truth-operations, and also that a proposition can be represented as the result of an operation on another, which will be a case of a proposition 'occurring in' another only if the

⁹ Cf. also Sundholm (1992) and Cheung (2000).

¹⁰ There is also some unpublished work by Hugh Miller III, bearing on these questions. In his essay on Tractarian semantics (1995), Miller develops Geach's understanding of the N operator notation. In unpublished work, Miller suggested that an extension of Geach's notational method would enable one to get by iterations of constant-embedding and variable-embedding logical operations from 'Fa' to 'Fb' in two steps, and back to 'Fa' in another two steps; and that a single application of a more complex iteration of the N operator would accomplish the same thing in a single step. He then argued that the method he was deploying could be used to support the claim (that he takes to be implicit in TLP 6.002-6.01) that, for any two propositions constructible from elementary propositions by iterated applications of operator N, there is an operation O', the application of which to the first proposition will yield the second.

operation in question is a truth-operation? So "Cnv'(A is the husband of B)" would not count as an occurrence of 'A is the husband of B' in another proposition, while '~(A is the husband of B)' would count as the occurrence of 'A is the husband of B' in another proposition. What, then, would be the rationale of this distinction? In neither the case of "Cnv'(A is the husband of B)" nor that of '~(A is the husband of B)', does 'A is the husband of B' serve as argument of any function, so being an argument of a function is not a condition of being said to 'occur'. In both cases, we might say that the resultant sentence is not 'about' the proposition 'A is the husband of B'. The way in which we write the operation does not affect the issue here. Just as 'Kennedy was assassinated' occurs in both 'Kennedy was not assassinated' and in 'Not (Kennedy was assassinated)', so there is no difference between Anscombe's 'ACnv(husband of)B' and my "Cnv'(A is the husband of B)" in respect of the occurrence or non-occurrence of 'A is the husband of B' in the resulting proposition. 11 One might want to limit the use of 'occur' to the case of occurrences of a proposition in another, when every expression of the sense expressed by the main proposition must include some version of the subsidiary proposition and one might indicate this usage by writing it as 'occur'; and one might use 'occur' for occurrences of a proposition in another, when the subsidiary proposition need not occur in every expression of the sense expressed by the main proposition. 12 Whether or not this gimmick provides a rationale for distinguishing the treatment of '~(A is the husband of B)' from "Cnv'(A is the husband of B)", it does allow us to conclude that 'A is the husband of B' does not occur in "Cnv'(A is the husband of B)", since the latter is the same proposition as 'A is the wife of B'. But can we say that 'A is the husband of B' does occur in "Cnv'(A is the husband of B)"? The gimmick leaves the question unsettled whether propositions might occur in other propositions as bases

There is a possible response that could be made by Anscombe, namely that what a truth-operation does to its base or bases is essentially done to the whole proposition or propositions, while a non-truth-operation is essentially an operation on a part or parts, a feature or features, of the base proposition or propositions and not on the whole proposition or propositions. It would then follow that 'ACnv (husband of)B' is not a mere notational variant of "Cnv'(A is the husband of B)". But since the latter is the *Tractatus* way of writing the result of an operation (see 5.2522), there does not seem to be any justification for the supposed Anscombian line of response, apart from the assumption that Wittgenstein is committed to a restrictive understanding of the occurrence-idea.

¹² There is a further sense of 'occur' introduced by Wittgenstein in the 'Notes Dictated to Moore', (1961a: 115), in which only names, and not propositions, can be said to occur in a proposition. But the *Tractatus* plainly does not restrict the use of 'occur' in this way.

of operations like Cnv. And it is exactly that sort of occurrence which will turn out to be important for the question what the use is of the g-variable, and also the question how to understand 'A believes that p', 'A says that p', and similar cases. The important point here can be seen if we distinguish clearly between the question whether a subsidiary proposition, which is present in another proposition as the base of a non-truth-functional operation, counts as 'occurring' in the latter, and the question whether there can be subsidiary propositions which are present in another proposition in which they function as the base of a non-truth-functional operation. When I speak of restrictive and non-restrictive readings of the occurrence-idea, I am concerned with the latter question, and with the significance for the Tractatus of reading 5.54 and 5.541 so that they do not exclude the presence of such subsidiary propositions. If the word 'occur', in 5.54 and 5.541, is taken to exclude calling the presence of such subsidiary propositions a case of occurrence, that will not affect the points I want to make. What I mean by a restrictive reading of the occurrence-idea is not a reading that requires us not to call the presence of such subsidiary propositions a case of occurring, but rather a reading that excludes the possibility of such subsidiary propositions altogether. The Tractatus excludes propositions having the logical role within another proposition of arguments of functions; that exclusion is not a matter of our simply not being able to call such cases 'occurrences'. I am concerned with the contrast: while subsidiary propositions which are arguments of functions are simply excluded altogether, does the Tractatus allow subsidiary propositions that are bases of non-truth-functional operations? A restrictive reading says 'No', a wide reading says 'Yes'. A reading that merely limits the use of 'occur' is not, as such, a restrictive reading of the occurrence-idea, in my sense. 13

It is worth noting, in connection with the use of 'occur', that Wittgenstein speaks, at *TLP* 4.0621, of negation as occurring in a proposition, while making it clear that the proposition's sense can be expressed without negation occurring in it. What can be said to occur in a proposition may be merely a feature of a particular way in which the sense of the proposition can be expressed. And we should also note that in a later discussion of these

¹³ My account here ignores complications arising from my use of the notion of *exclusion* in giving the possible ways of reading the *Tractatus* on the occurrence of subsidiary propositions. I hope to deal with these issues elsewhere.

issues, Wittgenstein himself emphasizes the parallel between the kind of way 'I wish to eat an apple' can be constructed from 'I eat an apple' and the kind of way in which 'I don't eat an apple' can be constructed from 'I eat an apple'; in both cases he speaks of the subordinate sentence as a 'constituent'. Both 'not' and 'I wish to' are what he there calls indexes, which change the use of the subordinate sentence (1979: 110–13). I shall get back to this 1934 discussion in section 4.

In sections 3, 4, and 5, I shall be engaged in the activity described by Wittgenstein as the clarification of our thoughts. The main technique of clarification that I use is that of showing how the truth-conditions of a proposition are expressed indirectly through the application of an operation to a different proposition or propositions. The kind of indirection that I have in mind is perfectly ordinary. Someone might say 'Anne was the elder sister and Mary the younger... No, wait, it was the other way round.' The truth-conditions of 'Mary was the elder and Anne the younger sister' are expressed indirectly by applying an ordinary-language expression of Cnv to 'Anne was the elder sister and Mary the younger.' The example illustrates how an operation like Cnv can be useful, despite the fact that whatever is said through the use of an expression for the operation can also be said without it.¹⁴

3. 'Every proposition asserted by Cheney is false': stage 1

I mentioned in introducing my topic that questions about the use of the g-variable come up when we think about *TLP* 4.1272. At 4.1272, Wittgenstein contrasts two ways of using the word 'object'. In the first sort of use, the sentence containing the word 'object' would be expressed in conceptual notation using quantifier and variable where 'object' was used in ordinary

¹⁴ On the *Tractatus* view, there is a contrast between the way in which elementary propositions express a sense, directly, and the way in which non-elementary propositions express a sense, through operations on elementary propositions. One could thus say that there is a kind of indirectness involved in the expression of sense of any non-elementary proposition. I am concerned with a more limited range of cases of indirectness. The kind of indirectness that I have in view can be eliminated, when a proposition that is constructed through the use of non-truth-functional operations is rewritten without the use of any such operations.

language. Thus, instead of 'There are two objects which...', we should have in the conceptual notation ' $(\exists x,y)$...' The contrasting sort of use of 'object' treats the word as having the role of a proper concept-word, as in 'There are objects', which is meant to say something parallel, about objects, to what 'There are books' says about books. The use of conceptual notation reveals the difference between the two sorts of case, and helps us to recognize the confusion in the second case. Wittgenstein does not explicitly say in 4.1272 that a corresponding contrast can be made out between uses of 'proposition'. But he does say, in quite general terms, that formal concepts are represented in conceptual notation by variables, not by functions or classes, and proposition is a formal concept. A natural method for answering the question what the use might be of the g-variable would be to investigate whether a contrast corresponding to that between the two uses of 'object' can be made out for two uses of 'proposition'. Roughly speaking, the contrast in both the case of 'object' and that of 'proposition' would be between philosophically innocuous cases, which go over in conceptual notation to variables, and philosophically problematic cases, which exhibit their problematic character when we attempt to translate into conceptual notation. The difference between the case of 'object' and that of 'proposition' would be that in the case of the philosophically innocuous uses of 'object', the variable which, in conceptual notation, replaces the word, is the variable name 'x' (4.1272), while the variable that will replace (on the line of argument I am pursuing) the philosophically innocuous uses of 'proposition' will be the g-variable. So I shall try now to show how that would work.

Here is what I take to be a philosophically innocuous use of 'proposition': 'Every proposition asserted by Cheney is false.' It is plain why this looks as if it is not going to work as an example of a philosophically innocuous use of 'proposition'. It looks as if I am saying something like this: 'For all x, if x is a proposition asserted by Cheney then x is false.' It certainly looks as if I am treating propositions just like things-with-properties, and *being asserted by Cheney* and *being false* as properties of propositions. But we should question why it seems to look like that. It is very natural to read the proposition about Cheney in the way just described, in terms of a particular model of generality—a model which is extremely misleading in the sort of case with which we are concerned. We need to backtrack from our natural attempt to read 'Every proposition asserted by Cheney is false' in terms of

the most familiar sort of generality, that of argument and function. In order to bring out what alternative there is, I shall need to discuss two different operations. My explanation will begin by ignoring the complexity brought in by one of those operations, the operation involved in 'Cheney says that p'. I start by explaining a simpler operation that takes any number of propositions as bases. I can illustrate the way the operation works by taking its application to three propositions, 'p', 'q', and 'r'. The application of the operation to those three propositions will yield as result 'If Cheney says that p, then not p, and if Cheney says that q, then not q, and if Cheney says that r, then not r.' The operation, applied to any number of propositions, has as its result a conjunction, one conjunct for each of the base propositions, each conjunct being constructed from a base proposition by forming a conditional saying that if Cheney says it, then not it. So in my starting case with 'p', 'q', and 'r' as bases, the result of the operation is a proposition saying that if Cheney says any one or more of 'p', 'q', and 'r', then not-that, in each case. If I write the operation as "C'($\overline{\eta}$)" where the values of " $\overline{\eta}$ " are the bases of the operation, I can specify the bases in various ways, for example by listing them, in the case in which there are only three bases. But one possible case is that in which we give the bases by using the g-variable: "C'(\overline{p} , $\overline{\xi}$, $N\overline{\xi}$)" The generality of "C'(\overline{p} , $\overline{\xi}$, $N\overline{\xi}$)" is not the generality expressed in quantifier-variable notation. It is the generality of the variable whose values are all propositions, used to give the bases of an operation which can take one or more propositions as base. Let me put again the essential point about 'Every proposition asserted by Cheney is false.' Its generality is not expressed in 'For all x, if x is a proposition uttered by Cheney then x is false.' Its generality is not tied to argument and function; it is the generality of what a propositional construction is carried out on. The g-variable has a use, I am suggesting, in giving the propositions serving as bases of operations, including, in my case, the bases of the C operation. Sullivan does recognize (2004: 53) that there is available in the Tractatus a second way of expressing generality, distinct from the generality expressed through quantifier and variables. The existence of this second sort of generality would not make a serious difference, though, to his overall argument, unless propositions were able to figure as bases of operations which are not, on the face of it, truth-operations. I am not suggesting that the propositions formed by such operations enable us to say something 'about' the propositions which occur in them. I mentioned

earlier, in discussing Anscombe's account of the Cnv operation, that a proposition formed by applying that operation to a proposition is not 'about' the proposition that occurs in it. The word 'about' is a tricky word, and one can use it in a relatively relaxed or a relatively restricted way. One might want to enforce some such usage as this: that if a proposition occurs in another only as base of an operation, the resulting proposition is not about the proposition occurring in it. In contrast, where (say) a non-empty singular term occurs in a proposition as argument of a function, one might say that the proposition is about the thing meant by the term. (I need not elaborate on how this might be developed.) This use of 'about' would go with Wittgenstein's general treatment of truth-functional complexity: propositions occurring in another proposition as arguments of truth-functions are not what the resultant proposition is 'about'. Staying with this use of 'about', one can say that propositions that result from the C operation on one or more propositions are not about those propositions. What is difficult in this area is this: we want to read 'Every proposition asserted by Cheney is false' as saying something about propositions: if uttered by Cheney they are false. The difficulty is to recognize that that is a possibly misleading use of 'about', and it is in any case a different use of 'about' from the restricted use I specified.

4. 'Every proposition asserted by Cheney is false': some things we need before stage 2

I have given only half of the explanation I need to give of my putatively innocuous proposition: 'Every proposition asserted by Cheney is false.' I need to explain how I want to treat 'Cheney says that p', the sort of case mentioned by Wittgenstein at *TLP* 5.541–2. I shall give a slightly round-about explanation, involving a more general treatment of questions about translation. My account will involve a degree of simplification of how translation and projection work, but although the simplification results in a conception of language which is unrealistically diagrammatic, it corresponds, I think, to the way Wittgenstein thought about these cases. There is an underlying claim I should want to make: that we can most easily grasp what Wittgenstein says about 'A believes that p' and related cases, if we see

how translation fits into the structure of ideas in the Tractatus. I start from what might appear as a difficulty of the line of argument I sketched earlier, whereby Wittgenstein might have thought he could treat all operations as involving nothing over and above what is involved in truth-operations. I had earlier mentioned that there is an internal relation between two propositions if one of the propositions says in English what the other says in French, and that therefore if (supposedly) wherever two propositions stand in an internal relation, one can be written as the result of an operation on the other, then supposedly a proposition in one language can be written as the result of an operation on the proposition in another language. This seems, though, to create difficulty for my sketch of how operations can all be represented in terms of truth-operations, since my sketch worked with the idea of two propositions, both of them truth-functions of elementary propositions, at different 'places' in a series of all truth-functions of the elementary propositions. A proposition which says in French what another says in English is not at a different 'place' in the series of propositions from the 'place' of the latter; they are in the same place. (They are, by the standards of the *Tractatus*, not distinct propositions; see *TLP* 5.141.) So the idea of operations as shifting us from one such place to another will not, it seems, allow us to treat the case of the operation taking a proposition in one language to the equivalent proposition in another. So it looks as if there is an important kind of case that my sketch of a possible argument cannot cope with. But there is a resolution of the difficulty if we take greater care in specifying the internal relation.¹⁵ I shall consider the case of 'William defeated Harold' and 'Guillaume défit Harold'. (In discussing this example, I shall not follow the philosophical convention of naming propositions for the sake of brevity. Wittgenstein held that propositions are facts, and that they cannot be named; and it is useful to speak about the propositions under discussion in ways which bring out their supposed character as facts. Wittgenstein did use the convention that the enclosing of a propositional sign in quotes gives an abbreviation of a description of the propositional sign-fact,

¹⁵ In any case, it is not strictly correct to say that operations are the way we shift from one 'place' in the series of propositions to another, since Wittgenstein's way of calculating *how many* propositions can be constructed by truth-functional operations on n elementary propositions requires that we allow for an operation that takes us from an elementary proposition to itself. But this does not really affect the question about how to deal with translation.

and I shall at various points use that convention. 16 To distinguish that use of quotes from other uses I indicate it with a superscript 'sf', for sign-fact.) The proposition describing the French propositional sign, "Guillaume" stands to the left and "Harold" to the right of "défit", stands in an internal relation to the proposition describing the corresponding English propositional sign, "William" stands to the left and "Harold" to the right of "defeated". 17 We can bring out the internal relation between the two by writing a description of one propositional sign through the use of an operation on a description of the other. We should have something like this: "English-to-French' ('William' stands to the left and 'Harold' to the right of 'defeated')". The proposition in double quotes, formed by what I call the English-to-French operation on a proposition describing an English propositional sign, is a way of writing a description of a French propositional sign, "Guillaume" stands to the left and "Harold" to the right of "défit". The internal relation could equally be expressed by writing the description of the English propositional sign by using an operation on a description of the French propositional sign. (One could also have an operation which turned a description of a French propositional sign to a description of the corresponding English one, and which turned the description of an English propositional sign to a description of the corresponding French one; carrying out the operation repeatedly on the results of previous applications thus toggles back and forth between descriptions of signs in one language and descriptions of signs in the other.) There is another way of bringing out the internal relations here, using an operation which turns a description in one language of how things stand into a description of a propositional sign in the other language. Thus "Rto-French'(William defeated Harold)" is a way of writing "Guillaume" stands to the left and "Harold" to the right of "défit". (We can use the English words 'It says in French that' for the operation that I have written as 'R-to-French'.) And we can equally have "French-to-R'('Guillaume' stands to the left and 'Harold' to the right of 'défit')" which is a way of writing 'William defeated Harold'. (I shall come back to this latter sort of case, which involves a variant of the use of 'is true' as an operation

¹⁶ I am indebted to Thomas Ricketts, who, in an unpublished piece, pointed out that Wittgenstein uses that convention in the 'Notes Dictated to Moore'. See Wittgenstein (1961a: 109).

¹⁷ There are *various* internal relations between the two propositions, but I shall be concerned only with one of them.

transforming a description of a propositional sign to a statement of what is so, constructed from the description of the sign-fact.)

There are several features of this account that need some discussion.

A. I should note explicitly two of the oversimplifications involved in my account. The first is the pretence that we can ignore the fact that there are many different ways of saying the same thing, and that an utterance described simply as a fact of how signs stand to each other may express quite different propositions. This oversimplification is, I think, implicit in Wittgenstein's treatment of "p" says that p'. The second oversimplification is a matter of my treating a group of closely related operations as if I had only a single operation in view. When I speak of the R-to-French operation, I ignore the fact that French may be spoken or written (written left-toright in the usual way, or in a vertical arrangement, or boustrophedonically, etc.) or put into Morse code or whatever; I ignore the enormous variety of facts (all with the same multiplicity) of different mouths uttering signs, or hands producing them on paper or on computer screens and so on, where all these facts are sayings in French, or writings in French, that William defeated Harold. I make corresponding oversimplifications in speaking of English. Some of the oversimplification introduced in these ways could be removed. But I think that Wittgenstein took for granted that an account that could be worked through for an abstractly simplified case could bring out the logical essentials of translation and projection, the logical features that would remain the same no matter what further complexity was introduced.

B. I need to connect what I have said about operations with rules of translation. I have argued that the internal relations involved in translating from one language to another can be brought out by writing a description of a propositional sign in one language by using an operation on a proposition describing a propositional sign in the other language. The internal relations can also be brought out by formulating translation rules. The rules can be formulated in two ways, (a) "p" is a translation of "q" and (b) "p" says that q'. In the case of my pair of examples, the formulation of the two sorts of rules would be (a) 'That "Guillaume" stands to the left and "Harold" to the right of "défit" says in French what is said by the fact that "William" stands to the left and "Harold" to the right of "defeated"; and (b) 'That "Guillaume" stands to the left and "Harold" to the right of "défit" says that

William defeated Harold.' The (a) rule can be formulated using the Wittgensteinian abbreviation of descriptions of sign-facts: "Guillaume défit Harold"sf is a translation of "William defeated Harold"sf.' The (b) rule can be formulated using the same kind of abbreviation this way: "Guillaume défit Harold" says in French that William defeated Harold." I argued in the previous paragraph that the internal relations between French and English sentences could be brought out by the use of operations, and in this paragraph that the relations can be brought out through translation rules. These two methods work in essentially the same way, and I need to explain the similarity. If I write the description of a French propositional sign by using the operation I called 'English-to-French', applied to the description of an English propositional sign, what I am doing is essentially connecting two propositional sign-facts by correlating their 'objects' (to use the kind of description Wittgenstein gives at 5.542), the 'objects' here being the French and English names. They are correlated by connecting one way in which the French names can stand to each other to a way in which the English names can stand to each other. Recall that Wittgenstein said that an operation is what has to be done to one proposition to make the other out of it. What one has to do to the proposition describing the English propositional sign to make it into a proposition describing the corresponding French propositional sign is to replace the English names by the French ones, and the description of how the English names stand to one another by the description of how the French ones stand to one another in the corresponding French propositional sign. (Wittgenstein makes this point about translation at TLP 4.025: translation proceeds by translating the constituents of propositions.) If, instead of bringing out the internal relation between the French propositional sign and the English one by writing a description of one as the result of an operation on a description of the other, I bring out the relation by the translation rule of the (a) type, I am again connecting two propositional sign-facts by correlating their 'objects'. The proposition "English-to-French' ('William' stands to the left and 'Harold' to the right of 'defeated')" describes a French propositional sign; it is a senseful proposition, saying that signs stand in such-and-such a relation, while the translation rule "Guillaume défit Harold"sf is a translation of "William defeated Harold" sf, is a rule, and does not say that anything is

the case. 18 Nevertheless, the proposition describing the French sign via the English one and the rule have this similarity: each connects two propositional sign-facts by correlating their 'objects'. They have, in that respect, the same form. So here I am introducing the idea (that I think is present in the Tractatus) of a similarity in form that can hold between a rule and a proposition constructed by an operation on another proposition: the similarity lies in there being two facts such that the rule and the proposition connect the facts by correlating their objects. I now want to turn to the (b) type of rule, illustrated by "Guillaume défit Harold" sf says in French that William defeated Harold.' The internal relation brought out through the rule is the same as the relation brought out by the use of the R-to-French operation (which allows us to write a description of a French sign-fact by an operation on a description of what William did to Harold) and the Frenchto-R operation (which allows us to write a description of what William did to Harold by an operation on a description of a French propositional signfact). In the case of the (a) type rules and the related operations, two signfacts are connected by correlating their objects, which are the French and English names. In the case of the (b) type rules and the related operations, the R-to-French and French-to-R operations in our case, we are again making a correlation of facts by a correlation of objects, but what we correlate is not two sign-facts but a French sign-fact and a fact of what William did to Harold; and they are correlated not by the correlation of French and English names but by the correlation of one French name with the Norman duke and by the correlation of the other name with King Harold. They are correlated by connecting one way the two French names can be related to each other with a way in which William can be related to Harold. We can use the French-to-R operation to construct a proposition that describes what happened at Hastings, and we can use the R-to-French operation to describe a French propositional sign, while the rule "Guillaume défit Harold" says in French that William defeated Harold' does not say that anything is the case. Nevertheless all three—the rule, and the proposition that describes the battle through an operation on a French

¹⁸ Compare *TLP* 4.241–2, where Wittgenstein discusses expressions of the form 'a = b', which allow substitutions of signs. Translation rules have a closely related function. Here too we have signs with the same meaning but the contexts in which we introduce one sign or the other are limited to one or other language. For the use of 'meaning' (*'Bedeutung'*) in connection with propositions, see Kremer (2002: 282–4).

propositional sign, and the proposition that describes the propositional sign through an operation on a description of what William did to Harold—have this formal feature: all three correlate two facts (that 'Guillaume' stands so to 'Harold' and that William defeated Harold) by correlating their 'objects'. The translation rules that I have mentioned could be said to be subsidiary rules, if we say that a single translation rule connects all English propositional sign-facts with all French propositional sign-facts by correlating all the constituents of English propositional signs with the corresponding constituents of French signs, or again we can say that there is a single translation rule connecting all French propositional signfacts with everything that can be said to be the case, by correlating all the constituents of French propositional signs with things. If we stick to the subsidiary translation rules that I have discussed, we should note that any such rule goes with two different ways in which we can use operations to bring out the internal relation that is brought out also by the rule. This is particularly important in the (b) sort of case. This rule: "Guillaume défit Harold"sf says in French that William defeated Harold' goes with two possible ways of using operations, one in which we say what William did to Harold by an operation on a description of a French sign, and one in which we say what the French sign-fact is, by describing what William did to Harold. In the first case, we can construct a proposition with the operation which I originally wrote as 'French-to-R' but which can be written as 'is true' (or, more fully spelled out, given the commitment to writing propositional signs as facts, 'what is said to be so by the fact that such-and-such signs stand so to each other, is so'), applied to "Guillaume" stands to the left and "Harold" to the right of "défit".' That operation, applied to the description of the French propositional sign, results in a proposition which says what William did to Harold. In the second case, we construct a proposition from the operation I wrote originally as 'R-to-French', but which can be written as 'It says in French that', applied to the proposition describing what William did to Harold; the result is the description of a French propositional sign-fact. It may seem very odd to say this, but I will say it again: the rule "Guillaume défit Harold" sf says in French that William defeated Harold', the proposition 'It says in French that William defeated Harold' and the proposition 'What is said to be so by the fact that "Guillaume" stands to the left and "Harold" to the right of "défit" is so' have a fundamental formal similarity, in the sense that they each

connect the French propositional sign-fact and the fact of what William did to Harold by correlating their elements.

C. There is a further feature of the account I have given of translation, an account which I take to be suggested by the Tractatus. My R-to-French operation can be regarded as a combination of two operations, the second of which is applied to the result of applying the first. The two operations, the application of which in succession will come to the same as an application of R-to-French, are R-to-English (which I have not so far mentioned) and English-to-French (which I discussed earlier and which turns a description of an English sign-fact to a description of a French sign-fact which says the same). R-to-French applied to 'William defeated Harold' results in a proposition that describes the French sign-fact that 'Guillaume' stands to the left and 'Harold' to the right of 'défit'. How exactly can that operation be seen as the result of two other operations in sequence? The first, R-to-English, turns 'William defeated Harold' to "William" stands to the left and "Harold" to the right of "defeated", that is, to a proposition describing an English sign-fact. The second, English-to-French, turns "William" stands to the left and "Harold" to the right of "defeated" to "Guillaume" stands to the left and "Harold" to the right of "défit".' What we need to attend to here is the new operation, the one introduced at this stage, R-to-English. A version of this operation is included in Wittgenstein's discussion at TLP 5.542: 'A says p'. In our case, 'p' on its own has as its truth-conditions that William defeated Harold. The operation which is written as 'A says', applied to 'William defeated Harold', constructs a proposition, the truth-conditions of which are that 'William' is uttered (from A's mouth) before and 'Harold' after the utterance of 'defeats'. The R-to-English operation is unlike the operations discussed earlier, in that it does not involve translation; it depends instead on the projective relation between a spoken English sentence and what it says is so. But it is like the translation cases in a fundamental way, namely that it correlates two facts by correlating their objects, which are in this case the Norman duke, correlated with the spoken 'William', and the Anglo-Saxon king, correlated with the spoken 'Harold'. The correlations are effected by connecting one way in which the two spoken English words can be related with one way in which the two people can be related. In my discussion of translation, I claimed that the internal relations which can be brought out through the use of operations can also be brought out by

translation rules. There is a corresponding point to be made about the R-to-English operation and this rule: 'That "William" is uttered before and "Harold" after "defeated" says that William defeated Harold.' This is the sort of rule that Wittgenstein writes as "p" says that p'. Thomas Ricketts speaks of such expressions as 'interpretations of sentential signs'. They are 'formulations of the application of a general rule', and they impose an interpretation on a sentential sign (Ricketts, unpublished). But any such rule goes, as one might say, in two directions. 19 As Ricketts says, it imposes an interpretation on a sentential sign; but it also works in the opposite direction. That is, it not only tells us what a particular sentential sign says, it also tells us what sentential sign says that p. This 'going in the opposite direction', in our case, is a matter of specifying what sign-fact says that William defeated Harold. If we are told that A said that William defeated Harold, the rule allows us to specify the truth-conditions for such a statement, namely that 'William' was uttered by A before, and 'Harold' after, the utterance of 'defeated'. The rule connects two facts by correlating their objects: it connects the fact that William defeated Harold with the fact that 'William' was uttered before and 'Harold' after 'defeated', by correlating William with 'William' and Harold with 'Harold'; the correlations are effected by connecting one way the English words can be related with one way in which William can be related to Harold. We should note the close relationship between the proposition resulting from the application of the Rto-English operation to 'William defeated Harold' and the rule 'That "William" is uttered before and "Harold" after "defeated" says that William defeated Harold.' Although the first is a proposition with genuine truthconditions and the second is a rule, they both make a connection between the propositional sign-fact that 'William' is uttered before and 'Harold' after 'defeated' and the fact that William defeated Harold, by connecting their objects. In the final part of this section, I shall argue that Wittgenstein's remarks about 'A believes that p', 'A says that p', and so on should be understood in terms of operations of the sort I have been discussing. But there is one further point to be made here about the sort of projection rule

¹⁹ The idea of a projection rule as allowing us to go 'in two opposite directions' is clearly present at *TLP* 4.0141, which says that we can derive the symphony from the score by a rule, and then, if we derive the symphony from the gramophone groove, we can use the first rule to derive the score from the symphony.

exemplified by 'That "William" is uttered before and "Harold" after "defeated" says that William defeated Harold.' The rule brings out the internal relation between a propositional sign-fact and the fact or purported fact stated; and the internal relation in question can also be brought out by two different operations: one, which will transform a statement of the fact or purported fact to a description of the propositional sign-fact, like my R-to-English operation, and the other, which will transform a description of the propositional sign-fact to a proposition stating the fact or purported fact. So we have the proposition "R-to-English' (William defeated Harold)", which is a way of writing "William" is uttered before and "Harold" after "defeated", and the proposition "English-to-R'('William' is uttered before and 'Harold' after 'defeated')" which is a way of writing the proposition 'William defeated Harold'. The English-to-R operation, like the R-to-English operation, connects two facts by correlating their objects. This operation, which has as its base a description of a propositional sign, can be written 'is true'. If we use the Wittgensteinian abbreviation of descriptions of propositional signs, we have, in our case, "William defeated Harold" is true. 'Is true' is here fitted in to the account I have given of operations, as an operation on a description of a sign-fact; it is what has to be done to the description to turn it into a description of the fact or purported fact. A structurally similar account can be given of 'is false' as an operation on a description of a sign-fact, which turns it into the negation of the proposition stating the fact or purported fact. So "William defeated Harold" is false is a way of writing 'William did not defeat Harold'. This point about 'is false' affects the story I need to tell about my C operation; I ignored the complication when I introduced the C operation in section 3, and I shall return to it later.

I have been leading up to the suggestion that we can understand what Wittgenstein would say about 'Cheney says that p' if we take it to be an application of an operation to a proposition. In the case of my example, 'Cheney says that William defeated Harold' would be an application of R-to-English to 'William defeated Harold'. (That is, I am treating 'Cheney says that' as a sign for the operation I have written as 'R-to-English'.) The result of the operation, in my example, is a proposition describing the sign-fact that 'William' is uttered from Cheney's mouth before, and 'Harold' after, 'defeated'. The operation transforms the base proposition, 'William defeated Harold', with its truth-conditions, to a different proposition,

describing the sign-fact produced by Cheney, a proposition with quite different truth-conditions. My suggested treatment of 'Cheney says that p' (and of the various other propositions, like 'A believes that p', mentioned by Wittgenstein) is quite different from any of the usual readings of Wittgenstein's remarks about such cases, including those of Anthony Kenny and Howard Mounce.²⁰ They each treat Wittgenstein as having taken these cases to involve a conjunction of a description of a fact (of signifying elements of some sort standing in a relation to each other, e.g., the fact of the utterance of such-and-such a word before such-and-such other word) and a further proposition-like statement, of the form "p" says p', giving what the sign-fact says. If one applies Mounce's account to my example, the idea would be that, according to Wittgenstein, 'Cheney says that William defeated Harold' would come to the conjunction of "William" is uttered by Chenev before and "Harold" after "defeated" with 'That "William" is uttered by Cheney before and "Harold" after "defeated" says that William defeated Harold.' The former conjunct is an empirical proposition; the latter is not. Mounce says that someone who tells us that A said that p reports to us what sounds A made, from which we are capable of grasping what A said to be so (1981: 86). This is a puzzling account. It is decidedly odd to suggest that, if someone says 'Cheney said that William defeated Harold', he is conveying to us what sounds Cheney made, and we can grasp from the description of the Cheney utterance-fact what it was that Cheney said was so. What is odd is that it appears that we have been told what Cheney said is so; we have not been left to grasp what Cheney said was so from information about the utterance-fact. And the account is odd in a further way. If, as Mounce says, someone who tells us that A said that p reports to us what sounds A made, how does the statement that A said that p tell us about the sounds? How do we get what A's uttered sounds were, if we are told what A said was so? It looks as if the person who hears the report of what A said can determine what sounds A made by working from a grasp of what one utters when one says that p. In other words, it looks as if, if one grasps from 'A said that p' what A's utterance-fact was, one is using one's grasp of the projective relation between utterance-fact and what is stated to be so, in order to grasp what the utterance-fact supposedly was; and one would hardly then (as Mounce suggests) go on to work out from the utterancefact what A said was so. One's grasp of what A said was so was the starting point for grasping what the utterance-fact was. And one could not then need the supposed second, non-empirical conjunct, in order to get from the utterance-fact to what A said was so.

I want to bring out the problems with this sort of account by comparing Mounce's reading with what would be a parallel suggestion about 'Cheney said in French that William defeated Harold.' The account of that proposition that would parallel Mounce's reading of Wittgenstein would say that 'Cheney said in French that William defeated Harold' reports that Cheney made these sounds: 'Guillaume' before and 'Harold' after 'défit'; and that we can grasp from having been told what sounds Cheney made, together with our grasp of 'That "Guillaume" is uttered before and "Harold" after "défit" says in French that William defeated Harold' that Cheney said in French that William defeated Harold. The right thing to say, though, about 'Cheney said in French that William defeated Harold' is not that it tells us what French propositional sign-fact emerged from Cheney, from which we can work out what Cheney said was so, but that someone who grasps 'That "Guillaume" is uttered before and "Harold" after "défit" says in French that William defeated Harold' can take 'Cheney said in French that William defeated Harold' to have as its truth-conditions that Cheney uttered 'Guillaume' before and 'Harold' after 'défit'. In other words, the movement of thought involved in the understanding of 'Cheney said in French that William defeated Harold' goes in exactly the opposite direction from that suggested by the Mounce account of Wittgenstein's views. Of course, Wittgenstein might nevertheless hold the view suggested by Mounce, but it is the sort of view that one would not ascribe to anyone unless one thought one had no choice. Here is the main point: if we grasp from being told what someone said was so what the person's utterance-fact was, we grasp what the utterance-fact was from our grasp of an internal projective relation, as for example the relation given by the rule 'That "Guillaume" is uttered before and "Harold" after "défit" says in French that William defeated Harold.' To read the truth-conditions of 'Cheney said in French that p' is to read them through one's grasp of the internal relation between the French sign-fact and the fact or purported fact that p. But this idea, that the truth-conditions of the complex proposition about Cheney are grasped by working from the subsidiary proposition and one's grasp of the internal relation, just is the idea that 'Cheney said in French that p' is constructed by

an operation on 'p', an operation that yields as its result a proposition describing a French propositional sign-fact that says that p. We can be helped to see the issues here if we turn to TLP 5.21. That remark implies that we can have two ways of expressing the same proposition, one of which does and the other does not represent it as the result of an operation on another proposition. 'Cheney uttered "William" before and "Harold" after "defeated" and 'Cheney said that William defeated Harold' are the same proposition (taking for granted Wittgenstein's rather generous conception of sameness of propositionhood, which is a matter of sameness of truth conditions, and taking for granted the oversimplifications about language mentioned earlier); but the second way of writing the proposition represents it as the result of an operation on a different proposition, the proposition 'William defeated Harold'. The truth-conditions are given indirectly, in the case of the second way of writing the proposition, through the internal projective relation connecting 'William defeated Harold' and "William" is uttered before and "Harold" after "defeated".' This is the relation which is expressed in 'That "William" is uttered before and "Harold" after "defeated" says that William defeated Harold.' So when Wittgenstein says that the form of 'A says that p' is that of "p" says that p', we can read this point as applying to the form through which 'A says that p' expresses its truth-conditions. Putting this point another way: 'A says that p' will have the same truth-conditions as a straightforward description of a propositional sign-fact, but the truthconditions are not represented in the same way; and Wittgenstein's point about the form of 'A says that p' applies to it as so written; it does not apply to the straightforward description of the sign-fact, which has the same truthconditions. Wittgenstein uses 'form' in various ways, and it applies here to the way in which a propositional sign is constructed. The way in which the propositional sign is constructed may give prominence to internal relations, and that is a formal feature of the sign that is not shared by some other ways in which the same proposition may be expressed. The point of the accounts given by Kenny and Mounce of Wittgenstein's remarks about 'A believes that p', 'A says that p', and so on, is to find some way of making sense of his claim that such remarks have the same form as "p" says that p'. Their solution to the problem consists in treating 'A believes that p', 'A says that p', and so on as conjunctions, one conjunct of which explicitly is of the form "p" says that p'. This is a fairly strained way of taking is of the same form as', since a conjunction of a proposition with "p" says that p' is hardly an obvious case of a proposition having the same form as "p" says that p'.21 And it is certainly odd to suggest that Wittgenstein meant a conjunction when he says nothing at all about anything being conjoined with "p" says that p' (and the various conjunction accounts have nothing to say about how one is supposed to grasp what the other conjunct is, the one that describes the signifying fact). I do not want to claim that my account of what Wittgenstein means by having the same form as "p" says that p' makes it a simple and straightforward matter. But it does provide a sense of 'sameness of form' which pertains to the mode of expression of a proposition (to a formal feature of the mode of expression), and which treats as central the correlation of two facts by correlation of the objects. If we represent the proposition 'Cheney uttered "William" before and "Harold" after "defeated"' by writing it as the result of an operation on 'William defeated Harold' (which is what we are doing with 'Cheney said that William defeated Harold'), we are correlating the battle-fact with the Cheneyutterance-fact by correlating their objects. If we simply write the proposition as 'Chenev uttered "William" before and "Harold" after "defeated", we do not thereby bring out the internal relation to the battle-fact.²² Of the various different cases that Wittgenstein mentions at TLP 5.542, I have focused on A says p; the spelling out of what is involved in the other cases, for example, that of A believes that p, would involve a more complex story, though Wittgenstein evidently thought the basic lines of approach would be the same. In all these cases (I am suggesting) the basic approach is that of treating 'A ϕ s that p' as constructed by a non-truth-functional operation on the proposition 'p'. The account that I am ascribing to Wittgenstein of all

²¹ Compare Anscombe's version of a conjunctive account (1963: 88). She says that it was not quite right of Wittgenstein to have said that 'A judges p' is of the form "p" says that p', since what he meant was that 'A judges that p' was a conjunction, with "p" says that p' as one of the conjuncts, though on her view it is the 'business part' of 'A judges that p'.

While I reject the conjunctive accounts that have been given of *TLP* 5.542, there is a point about conjunction which is available on the account that I have given. If one allows that the expression of a rule can be added to a proposition without changing its sense, and if one takes Wittgenstein's view to imply that 'Cheney said that William defeated Harold' is the same proposition as 'Cheney uttered 'William' before and "Harold" after "defeated"', one can add 'That "William" is uttered before and "Harold" after "defeated" says that William defeated Harold' to either formulation of the proposition about Cheney, without changing its sense. So there is nothing problematic about saying that 'Cheney says that p' says the same as the proposition describing Cheney's utterance of 'p' conjoined with an expression of the rule that 'p' says that p. But this point does not involve (as the conjunctive accounts of 5.542 do) an explanation of what Wittgenstein took to be meant by propositions like 'Cheney says that p' in terms of a conjunction.

these cases has similarities to his treatment of what he calls indices in 1934. He there argues for a parallel between the way in which 'not-p' works and the way in which 'I wish that p' and similar constructions work. My argument does not depend upon his treatment of the issue in 1934, but it is certainly interesting that he was at that time quite happy to make a connection between what he had called operations and sentence-constructions with 'I wish that', 'Smith understands that', and so on. These are signs which alter the way the propositional signs to which they are attached are used; and that is what 'Cheney says that' does, when it is followed by a propositional sign. In summary of the issues here, I treat as central the idea of an indirect expression of truth-conditions, when a proposition is represented as the result of an operation on another proposition. Philosophical clarification of a proposition (of the sort suggested by the Tractatus) can involve making clear that its truth-conditions have been indirectly expressed through the use of an operation on another proposition. That is what I have attempted to do for the case of propositions like 'Cheney says that William defeated Harold.' Philosophical clarification, as I have been trying to carry it out in sections 3 and 4, could be said to depend upon my understanding of the occurrence-idea. But in fact the dependence is limited to this: that the practice of clarification, as I engage in it in sections 3 and 4, does not rule out treating propositions as bases of such operations as the Cheney-says-that operation or the C operation. At no point is my clarification impeded by the occurrence of a proposition as the base of an operation which is not, on the face of it, a truth-operation. I should add that my account allows for some cases of construction of propositions using non-truth-functional operations to result in contexts which are 'opaque', in the sense that substitutions of coreferential terms do not preserve truth-value, and for other cases of construction of propositions using non-truth-functional operations to result in contexts which are 'transparent', in the sense that such substitutions will preserve truthvalues. This is a matter determined by the operation or operations, as can be illustrated by the contrast between the Cheney-said-that operation, which produces a referentially opaque context, and the Cnv operation, which produces a referentially transparent context. My suggestion is, then, that there is available within the Tractatus a fairly straightforward way of handling many cases (at least) of referential opacity, as a matter of how an operation constructs truth-conditions from the base proposition or

propositions. The presence of an opaque context indicates that a proposition has been given an indirect use in the construction of the truth-conditions of the proposition within which it occurs. The sense of the larger proposition will always be expressible in another way, without any opaque context within it. The presence of the opaque context is a feature, not of the sense of the larger proposition, but of the particular way in which that sense was expressed. There is here an interesting comparison to be made with Frege's treatment of such contexts, which makes a quite different use of the notion of indirection.

Something should be said about how to read TLP 5.54 together with 5.541. There is implicit in both remarks the distinction between what has to be present in every expression of a particular sense, and what is variable, as the propositional sign might be constructed in various ways. Suppose there to be a proposition which expresses its sense through the presence of a subsidiary proposition, and it appears as if what is expressed is that the subsidiary proposition has such-and-such property or stands in suchand-such relation to something, and suppose further that some functionargument structure involving a proposition as argument runs through all expressions of the sense of the original proposition. The function-argument structure of the original proposition is doing a kind of expressive work that has to be present in any version of the main proposition.²³ Contrast the case of propositions constructed from the application of an operation, not a truth-operation, on a subsidiary proposition. All such cases will be ways of writing a proposition that can be written without the subsidiary proposition, and without the operation. The example we started from, "Cnv'(A is the husband of B)", brings this out. Non-truth-functional operations, when they are used to express a proposition, do not go all the way down into the general form of proposition, whereas any function-argument structure that is doing expressive work in some version of a proposition has to be present, or replaced by something doing equivalent expressive work, in any version of the proposition. When Wittgenstein says that it looks as if it were possible for one proposition to occur in another in some way other than as base of truthoperations, he is speaking in a misleadingly condensed way. We should ask how exactly he thinks 'A believes that p' looks, what it is for it to look as if it expresses a relation. It looks as if one proposition occurs in another, not as base

²³ See TLP 3.31, for the idea of a part of a proposition that *characterizes* its sense.

of truth-operations, and such that what is essential to any expression of the sense of the main proposition is either the subsidiary proposition's occurrence, not as a base of truth-operations, or some equivalent form of expression. This is what is supposed to appear to be a possible sort of case, when we look at 'A believes that p' and take it to express a relation between A and p. I think that Wittgenstein took it to be obvious that he was in no way excluding the presence of subsidiary propositions as bases of non-truth-functional operations. The possible use of such operations in the construction of propositions is actually part of what is involved in the idea of propositions as in a projective relation to reality. I do not think it would have occurred to him, after he had written the 5.2s, that he could be supposed to have excluded the role subsidiary propositions have in other propositions, as bases of non-truthfunctional operations. We need to read the pair of remarks, 5.54 and 5.541, that look as if all occurrences of a proposition in another except as base of truth-operations are being ruled out, with a clear recognition of the importance of Wittgenstein's reference in 5.54 to how propositions occur in the general propositional form. This phrase is really being carried on down into the subsequent discussion without being explicitly repeated. How propositions occur in cases in which their occurrence does not characterize the sense of the main proposition within which they occur is simply not under discussion in this passage. I should add that the idea that propositions never occur as arguments to a function is an idea that is present in Wittgenstein's thought from very early stages onwards, and is highly integrated with the other philosophical ideas in the Tractatus. In contrast, the idea ascribed to him by those who read 5.54-5.541 in a restrictive way, that propositions cannot occur in other propositions as bases of non-truth-functional operations, has no motivation within the general body of Tractatus ideas. Ascribing it to Wittgenstein leads to contorted readings of his views about belief, and makes it impossible to apply his general idea about how formal concepts are expressed to the concept proposition. We need to read 5.54-5.541 starting from his other ideas, with a recognition that his writing in the Tractatus is sometimes so concise as to be extremely misleading.

My claim that there is no motivation to be found within the body of ideas central in the *Tractatus* for the view that propositions cannot occur in other propositions except as the bases of truth-operations may seem to fly in the face of proposition 5, which is a central point in the *Tractatus*: that propositions are truth-functions of elementary propositions. But this is by no means

incompatible with the occurrence of propositions as bases of non-truthfunctional operations; it implies simply that any proposition written as the result of a non-truth-functional operation or operations on some proposition or propositions can be written also as a truth-function of elementary propositions. We can construct the truth-conditions of a proposition indirectly, from another proposition or propositions, using an operation or operations. When a proposition is used in such an indirect construction, there is no simple general principle available to dictate anything about what sorts of substitution (for the contained proposition, or for expressions within it) will preserve truth-values. The Tractatus is not committed to extensionalism, if by 'extensionalism' one means that a proposition that occurs in another can always be replaced by another proposition with the same truthvalue, without affecting the truth-value of the proposition within which the original proposition occurred. (The Tractatus is committed to a weaker form of extensionalism: if a proposition that occurs within another cannot be replaced by another with the same truth-value without affecting the truthvalue of the whole proposition, then the containing proposition can be written in another way, without the occurrence in it of the originally contained proposition. This is a consequence of TLP 5.54.)

There is a minor point which should be mentioned here. Some readers of Wittgenstein take it that "p" says that p' is a pseudo-proposition that (as Kenny puts it) 'falls under the axe which cuts off pseudo-propositions' (1973: 101). I have spoken of "p" says that p', and such similar cases as "p" says in French that q', and "p" is a translation of "q", as rules; and I should certainly argue that they do not fall under any supposed *Tractatus* axe. These sentence-constructions have a use as a kind of linguistic tool or expedient; they are *Behelfe der Darstellung*, in the same general family of kinds of uses of signs as 'a = b'; see *TLP* 4.242. If one takes for granted that the *Tractatus* treats as nonsense-that-falls-under-the-axe every proposition-like construction that is neither a senseful proposition nor a tautology nor a contradiction, one will be forced to conclude that "p" says that p' (and the like) are bits of nonsense. But that reading of the *Tractatus* should be abjured.²⁴

5. 'Every proposition asserted by Cheney is false': stage 2

I claimed in section 3 that 'Every proposition asserted by Cheney is false' should be understood as a philosophically innocuous use of the g-variable. The idea was that the variable provides the bases for an application of the C operation. In section 3, I explained the C operation without worrying about 'Cheney says that p'. Section 4 was meant to put me into a position to explain the C operation without ignoring the question how 'Cheney says that p' should be treated. In my original exposition of the C operation, I also ignored the complexity introduced by the use of 'is false', and I shall no longer ignore it. I shall explain first how the C operation works if it is applied to a single proposition, namely 'William defeated Harold'. "C'(William defeated Harold)" is a way of writing 'If Cheney says that William defeated Harold, then "William defeated Harold" is false.' The first part of that proposition, 'If Cheney says that William defeated Harold', is itself a way of writing what we can also write as 'If Cheney utters "William" before and "Harold" after "defeated".' I argued in section 4 that "William defeated Harold" sf is false is a way of writing 'William did not defeat Harold'. So 'If Cheney says that William defeated Harold, then "William defeated Harold"sf is false' is a way of writing 'If Cheney utters "William" before and "Harold" after "defeated", then William did not defeat Harold.' The C operation, applied to 'William defeated Harold' gives us 'If Cheney utters "William" before and "Harold" after "defeated", then William did not defeat Harold.' In general, if the C operation is applied to any single proposition 'p', the result is 'If Cheney utters "p", then not p', where the antecedent contains a description of a sign-fact, as in the example above. The C operation on any number of bases produces a conjunction with one conjunct of the form just given for each base proposition. "C'(William defeated Harold)" is a proposition in which 'William defeated Harold' occurs as the base of an operation. It is constructed from 'William defeated Harold', just as propositions can be constructed from other propositions using such operations as negation. Just as a single proposition can occur in a proposition constructed using the C operation, so too the g-variable can occur in a proposition constructed using the C operation, where the variable gives the propositions to which the C operation is applied. This

sort of use of the g-variable illustrates its innocuous non-philosophical use. Instead of my example of 'Every proposition asserted by Cheney is false', I could have worked with other sorts of example, such as 'There is at least one proposition believed by Jews and Christians.' In such examples, we are not quantifying over propositions but constructing propositions using the g-variable to give the bases of an operation. My original suggestion was that we could read TLP 4.1272 as implying a contrast between philosophically innocuous uses of 'proposition' and philosophically confused uses, where the difference would come out when we translate, or attempt to translate, our propositions into conceptual notation. That contrast turns out to depend upon the kind of generality which our remarks are intended to express. Propositions which, on translation into conceptual notation, use the gvariable to express the generality of a propositional construction have one sort of generality. Philosophical propositions about propositions typically involve the apparent intention to quantify over propositions; that is, they are would-be uses of a different sort of generality, the generality expressed in conceptual notation by quantifier and variable. A good example would be 'Propositions occur in other propositions only as bases of truth-operations.' The problem with a sentence like that is not that it cannot be used to express a senseful proposition, but that, so far as someone uttering it wants to characterize the formal concept proposition and also wants to say something with the sort of generality expressed by quantifier and variable, there is an unresolved unclarity in her intentions. It is not part of my aim here to explain in any detail what goes wrong in philosophical generalizations about propositions; what I am trying to do is only to show that TLP 4.1272 can be applied to the formal concept proposition in a way which parallels the explicit treatment there of the formal concept object. If I am right about that, though, it looks as if there is a serious question (to say the least) whether 'Propositions occur in other propositions only as bases of truth-operations' says anything at all. So it appears as if I have sawn off the branch on which I am sitting, for it looks as if my argument has led to the suggestion that the 'occurrence-idea' is not any coherent idea at all. I began the chapter by claiming that I would defend one interpretation of it, against what I took to be Peter Sullivan's understanding of it. But it now appears as if my chapter defends an interpretation of what it has revealed to be a bit of nonsense, to put it bluntly. I shall treat this problem as briefly as it can be treated here, in section 7, but shall first consider Sullivan's conclusion that Wittgenstein has no way to construct the g-variable.

6. Sullivan and the general form of proposition: some comments

Sullivan's first argument about the g-variable, that Wittgenstein has (apparently) no way to construct the variable, makes trouble, or seems to, not just for the sort of case that I have been considering, of an explicit use of the g-variable in the construction of a proposition from other propositions. If I am right in the arguments of sections 3, 4, and 5, the g-variable is needed if we want to write in a conceptual notation many perfectly ordinary propositions. My example was 'Every proposition asserted by Cheney is false', an ordinary proposition if anything is. We do not need to know the tacit conventions through which such a proposition expresses its sense; see TLP 4.002. But, so far as Wittgenstein is confident that the propositions of our everyday language are 'in perfect logical order' (TLP 5.5563), he is confident that our language has the means of expression for the generality of such propositions as 'Every proposition asserted by Cheney is false', that is, that we have the g-variable, or its equivalent in the tacit conventions through which such a proposition is expressed in ordinary language. Such confidence might of course be misplaced, and that would be the force of Sullivan's argument. But here we need to have a quick look at how that argument works. As Sullivan notes, the construction of the g-variable depends upon the possibility of specifying a different variable, the variable written as 'p' in TLP 6, which has all elementary propositions as its values. Wittgenstein gives three methods by which a variable, the values of which are propositions, can be specified. The first is direct enumeration of the values of the variable, but since we cannot assume that there is only a finite number of elementary propositions, we cannot assume that enumeration would be available as a way of specifying the p-variable. The second method, specifying the values of the variable by giving a function, is not relevant, and I shall not here go into details. Method 3 is the interesting case. In this method, one gives a formal law governing the construction of the propositions that are the values of the variable. Here is the entirety of what Sullivan says (2004: 52) in ruling out this method as a possible way of specifying the p-variable:

Method 3 is impossible: a formal series is generated by an operation which gives expression to a structural relation between its basis and result (*TLP* 5.22); lacking such inter-relations, elementary propositions do not constitute a formal series.

What is odd about his treatment of this case is that he takes it to be completely obvious. This is odd because Wittgenstein himself, in the Notebooks, took the opposite view, and never explicitly gave up what he said there, which was that elementary propositions must have something in common, not common to elementary propositions and complex ones, and that therefore they must be capable of being developed from one another as the results of operations. What they have in common is given expression in such a development (1961b, entry dated 23.11.16). Wittgenstein did in 1916 envisage the possibility of a formal series in which the elementary propositions are developed from one another—exactly what Sullivan dismisses without argument, where this dismissal plays a key role in his argument that Wittgenstein has no apparent way to construct the g-variable. It may be that at some time after 1916, Wittgenstein gave up the idea of a formal series of elementary propositions, or it may be that he did go on thinking that such a formal series was possible. In the circumstances, all that can be said is that Sullivan's argument has a gap at a crucial point; one cannot simply write off the possibility of a formal series of elementary propositions.²⁵ One does not, though, need Sullivan's argument, in order to recognize that there are extremely serious problems with Wittgenstein's treatment of the general form of proposition in the Tractatus. These are the problems in view in the Investigations, especially in the sections beginning at §89. Wittgenstein speaks, at §92, of seeing in the essence something that lies beneath the surface of our language, something which we see when we look into it. And this is profoundly applicable to the experience of looking into language and seeing in our propositions their essential similarity, seeing all of them as truth-functions of elementary propositions, seeing all of them as values of the g-variable. The general form of proposition is given in a schematic way at TLP 6,26 but the essential

²⁵ The fact that Sullivan sees as obvious the impossibility of an approach which Wittgenstein, at least in the *Notebooks*, took to be plainly possible suggests some underlying difference between Sullivan and Wittgenstein about the conditions in which propositions can be developed from each other in a formal series. On the matter of the possibility of a formal series of elementary propositions, see also Sundholm (1992: 69), who argues that *TLP* 5.252 and 5.2522 imply that the generation of a formal series by a formal law 'imposes a syntactic hierarchy'. But this appears to be a misreading of 5.252, where Wittgenstein takes the step from one type to another to be a step from one term of a formal series to the next. The point is the same as that in Wittgenstein (1961b), entry dated 26.4.16. There is no implication that a formal law generating a formal series always involves the imposition of a hierarchy.

²⁶ See on this matter Juliet Floyd (2007: 220, n. 20).

similarity of propositions seems to be given directly in language itself if we look at language as Wittgenstein did: through (as he put it) the glasses on his nose.27 To see language as Wittgenstein then did is to see it through (through the medium of) an idealized conception of the logical structure of propositions.²⁸ This mythological conception of language is under scrutiny throughout Wittgenstein's later thought. There is a second kind of fundamental criticism of the Tractatus understanding of the general form of proposition. It involves a kind of offhandedness about generality that ran through Wittgenstein's early work, and that is examined and criticized in Philosophical Remarks and other places.²⁹ The problems about generality discussed by Ramsey and Wittgenstein in 1929 are indeed directly relevant to the question whether the g-variable can be constructed if the number of elementary propositions is infinite.30 Anscombe quotes Wittgenstein as having said that the Tractatus 'was not all wrong: it was not like a bag of junk purporting to be a clock, but like a clock that did not tell you the right time' (1963: 78). Peter Sullivan's argument, if it did genuinely allow us to conclude that Wittgenstein had no way to construct the g-variable, and that the variable has no apparent object-language use, would make the book much less like a clock telling the wrong time and more like a bag of junk purporting to be a clock. For it would not tell us the time at all; not even the wrong time. How far then should we be persuaded by Sullivan? His argument that the p-variable cannot be specified (and that therefore the gvariable cannot be constructed) leaves out an important possible response by Wittgenstein; and his argument that the g-variable has no object-language use depends on a restrictive understanding of the occurrence-idea, which should, as I have argued, be given up. On the other hand, he is (I think)

²⁷ Philosophical Investigations (1958: §103).

⁸ *PI* §102.

²⁹ See also F. P. Ramsey's criticism of Wittgenstein's and his own accounts of generality, in his *The Foundations of Mathematics* (1931). For some comments on this matter, see Floyd (2007: 225, n. 66); also Diamond (2011).

³⁰ Diamond (2011). Ramsey's argument in his 1931 applied directly to his own and Wittgenstein's account of quantified propositions, but his arguments (if sound) apply also to all truth-functions with an infinite number of truth-arguments. The argument (as I see it) is that, although such truth-functional constructions count as sayable on the *Tractatus* understanding of sayability, they are not genuinely sayable. The first application of Wittgenstein's N operation to an infinite number of elementary propositions would be a truth-function with an infinite number of arguments, and would not be genuinely sayable (although it would count as sayable on the *Tractatus* understanding of sayability).

right that there are serious problems about the construction of the g-variable in the case in which the number of elementary propositions is infinite.

7. Sense, nonsense, and the activity of clarification

In an essay on the *Tractatus* and its understanding of language, Thomas Ricketts describes what happens when we work through Wittgenstein's presentation of what appears to be a metaphysics underlying language:

When... we reflect on Wittgenstein's words, on the view we take these words to convey, we realize that, on their own telling, they do not convey a view at all. Wittgenstein's words pull themselves apart. (Ricketts 1996: 90)

We find something similar happening if we attempt to follow out the implications of remarks in the 5s for the question how propositions can occur within other propositions. The question itself collapses. And we can return to Ricketts for an answer to the question 'What then?' The recognition of the collapse into incoherence of the line of argument we take ourselves to be following as we read the Tractatus 'draws us away', Ricketts says, from the 'illusory goal' of reaching theoretical conclusions about language; what it draws us to is 'the activity of saying clearly what can be said, the activity of philosophy' (1996: 92). The Tractatus then shows us, we could say, a different face: instead of appearing to give us a general metaphysical account of language and what underlies it at the deepest level, we can see it as a manual for the activity of clarification. It teaches us to see, as central in this activity, the making clear of both differences in use and similarities of use. The 3.3s are particularly important in sketching the kind of activity Wittgenstein has in mind. Differences in use can be made clear through a conceptual notation in which such differences are not obscured by superficial similarities of signs. An equally important technique of clarification, mentioned in the same group of remarks, is that of the presenting of what is common to various signs-in-use by giving a variable whose values are propositions containing those signs, thus used. Any variable, through presenting what is common to the propositions which are its values, can play a role in clarification. And that point applies to the gvariable. The g-variable is meant to play a role in the activity of philosophical clarification, in that it presents what is common to a use of signs, a

common form that we are then able to recognize in our own senseful speaking. I argued in sections 3, 4, and 5, against Peter Sullivan, that the g-variable has an object-language use. But that should not be thought to be its only use. A variable can be put before us in the activity of clarification, and can help us to grasp a formal similarity in the way signs are used. The use of the g-variable in such clarification is not an 'object-language' use, but neither is it a metalinguistic use. The kind of use that is in question here is the same as that which Wittgenstein speaks of in Philosophical Investigations when he mentions Indian mathematicians saying 'Look at this'. Something is put before us which enables us to see a formal similarity which we had not earlier been aware of. The g-variable is meant to put before us an essential similarity present in our use of signs. Another of the main elements in Wittgenstein's 'manual of clarification' is the distinction between signs the common presence of which in different propositions marks a common form and content, and signs the use of which is to indicate a difference in form between propositions (signs for operations). So the presence of the latter in two propositions indicates no common form or content. I have argued that this distinction between signs marking commonalities and signs marking differences of form enables Wittgenstein to treat some propositions as indirectly expressive of a sense, through the presence in them of one or more subsidiary propositions, which are the base or bases of one or more operations. How does viewing the Tractatus as a manual for the activity of clarification affect the question about my sawing off the branch on which I was sitting? The sawing-off had apparently been done by the argument of section 5, which implied that the 'occurrence-idea' was not a coherent idea at all, and that the question how the idea should be understood was therefore a non-question. There is, though, a genuine dispute that remains, a dispute about the Tractatus as a manual of clarification. The dispute concerns the possibility of using, within that activity, modes of representation of propositions, modes of representation in which propositions are constructed from other propositions using non-truth-functional operations, like Cnv, or Cheney-says-that. Here we can see again the role the g-variable is supposed to have. The essential similarity of the values of the g-variable can (supposedly) be seen to be present in propositions constructed using non-truth-functional operations on subsidiary propositions; that essential similarity would not be present if a proposition occurred in another as argument of a function. The original dispute about 'how to

understand the occurrence-idea' can be reconceived as a dispute about clarification, which Wittgenstein takes to be guided by a grasp of the essential similarity present in all values of the g-variable.

8. Conclusions

In giving my conclusions, I take for granted that reading the *Tractatus* is not a simple matter of moving through arguments to the point at which one can 'throw away the ladder', but is rather a movement that goes backwards and forwards, as one rethinks the arguments, and sees differently how the book leads one on. I do not (that is) take for granted, in giving the conclusions, that we have reached the stage at which we take 'Propositions can occur in other propositions only as the bases of truth-operations' to be nonsense. I take it to be something that *engages us in thought*, which a sentence can do even if we come ultimately to take it to be nonsensical.

There are two different directions in which one's thought can proceed if one is investigating Wittgenstein's views in the *Tractatus* about the occurrence of propositions within other propositions.

One can start from the 5.2s and proceed from there (which is what I have done), or one can start from 5.54 and 5.541. If one takes the latter route, and if one treats 5.54 and 5.541 as having the implications which they certainly appear to have, and if one thus rules out entirely the occurrence of propositions in other propositions as bases of operations that are not truth-operations, there are (I have suggested) substantial costs, eight of which I shall list here.

- A. A restrictive reading of the occurrence-idea, based on 5.54 and 5.541, introduces an apparent inconsistency within Wittgenstein's views. It is not clear whether the restrictive reading can be understood in a way compatible with Wittgenstein's remarks about operations in the 5.2s.
- B. The restrictive reading severely limits the options when one tries to make sense of what Wittgenstein was saying about 'A believes that p', 'A says that p', and similar constructions. The usual readings of these remarks, which are intended to be compatible with a restrictive reading of the occurrence-idea, have very little plausibility.

- C. A consequence of the restrictive reading, brought out by Peter Sullivan's essay on the general form of proposition, is that there is no apparent use for the g-variable. The restrictive reading makes the role in the *Tractatus* of the g-variable a mystery.
- D. A restrictive reading makes it impossible to see how Wittgenstein's discussion of formal concepts at 4.1272 can be applied to *proposition*.
- E. The restrictive reading does not follow from the general point that propositions are truth-functions of elementary propositions; and there is no other candidate, among general *Tractatus* ideas, which would underpin the view that propositions cannot occur in other propositions as bases of operations like Cnv. The idea that they cannot occur in such contexts does not seem to have any clear motivation within the general structure of ideas with which Wittgenstein was working.
- F. Wittgenstein's remarks at *TLP* 4.002 suggest the enormous complexity of the resources through which sense is expressed in everyday language. A restrictive reading of the occurrence-idea will lead us to miss out on the range of expressive resources of everyday language, and on its flexibility, flexibility which depends on the use of non-truth-functional operations in the construction of propositions. While it is a consequence of Wittgenstein's views that 'Every proposition asserted by Cheney is false' could be expressed as a truth-function of elementary propositions, there is no reason to think that, if it were expressed without the use of non-truth-functional operations, we could actually take it in. Our capacity to communicate all sorts of ideas with each other depends upon the kind of use of operations which the restrictive reading of the occurrence-idea rules out.
- G. A restrictive reading of the occurrence-idea will lead to our missing much of what is included in the activity of philosophical clarification, as Wittgenstein understood it. One of my aims in sections 3, 4, and 5 was to show how philosophical clarification can bring out the kinds of indirection through which sense may be expressed, given the use of non-truth-functional operations.
- H. A restrictive reading of the occurrence-idea leads to missing out the very interesting treatment of opaque contexts, available within the *Tractatus*, and it results in a too simple understanding of the 'extensionalism' of the book.

In summary: there are all sorts of things that are the matter with Wittgenstein's treatment of language in the *Tractatus*, but it does have a complexity and subtlety and power which we shall miss if we, in our thinking about the book, excise the role of non-truth-functional operations, and ascribe to Wittgenstein the idea that propositions never occur in other propositions as the bases of such operations.

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Russell's Merit¹

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'It is a great thing to find a puzzle; because so long as it is puzzling, one knows one has not got to the bottom of things.'

Bertrand Russell to Lucy Donnelly, 13 June 1905

I. Russell's merit—the obvious interpretation

In the preface to his *Tractatus Logico-Philosophicus*, Wittgenstein, never a great one for acknowledging his intellectual debts, writes (1985: 27–9):²

... what I have here written makes no claims to novelty in points of detail; and therefore I give no sources, because it is indifferent to me whether what I have thought has already been thought by another. I will only mention that to the great works of Frege and the writings of my friend Bertrand Russell I owe in large measure the stimulation of my thoughts.

¹ Work on this chapter was partially supported by a fellowship from the Franke Institute for the Humanities at the University of Chicago. The main idea is briefly expressed in my 'The Cardinal Problem of Philosophy', 2007: 152–4. Earlier versions were presented at a Conference on 'Descriptions and Logical Forms: 100 Years of "On Denoting"', University of Padua, Italy, 16 December 2005; to the Department of Philosophy, University of Toronto, 3 November 2006; at Reading Wittgenstein: Conference in Honour of Hidé Ishiguro, University College, London, 14 September 2007; to the Department of Philosophy, University of Pittsburgh, 26 October 2007; and to the Wittgenstein Workshop of the University of East Anglia, 19 March 2009. Thanks are due to the audiences at these presentations, and an anonymous referee, for helpful comments.

I dedicate this chapter to the memory of my beloved wife, Angela Gugliotta, who passed away on I June 2010. Angela was in the audience when I presented the paper in London, and I still remember the smile and embrace she gave me at the end.

² References to the main text of the *Tractatus* are by numbered proposition; references to the Preface (as here) by page number in the Ogden/Ramsey translation. Generally, I will cite from the Ogden/Ramsey translation, with occasional modifications drawn from the Pears/McGuinness translation.

References to Frege and Russell are scattered throughout the work, but one stands out for the praise awarded to the latter in connection with some of the central themes of the *Tractatus*:

4.0031 All philosophy is 'Critique of language' (but not at all in Mauthner's sense). Russell's merit is to have shown that the apparent logical form of the proposition need not be its real form.

This chapter concerns the proper understanding of 'Russell's merit'—what did Wittgenstein take Russell to have shown, and why was this lesson of such crucial philosophical importance?

There is an 'obvious' interpretation of Wittgenstein's remark about Russell's merit, which I daresay has been advanced by almost everyone writing on this topic. According to this interpretation, Wittgenstein is referring to Russell's theory of descriptions, first introduced in 'On Denoting'. We are to understand his remarks primarily in connection with a theme introduced just two paragraphs earlier, in 4.002:

Language disguises the thought; so that from the external form of the clothes one cannot infer the form of the thought they clothe, because the external form of the clothes is constructed with quite another object than to let the form of the body be recognized.

As early as 1913, Wittgenstein praised Russell's theory of descriptions as 'quite CERTAINLY correct' (Wittengenstein 1988: 61). The theory of descriptions, so the story goes, introduced to Wittgenstein the crucial distinction between the surface, or grammatical form of a proposition, and its real, logical form. For example, the proposition 'The present king of France is bald' appears to be of simple, subject—predicate form, comparable to 'Nuel Belnap is bald'. Russell's analysis shows, however, that while the second sentence has a simple logical form that can be represented in a proper logical symbolism as

Bn

the first has a quite distinct logical form, namely

$$(\exists x)((\gamma)(K\gamma \equiv \gamma = x) \bullet Bx)^3$$

³ Although this sentence makes use of the identity sign, which Wittgenstein tells us can be dispensed with in a proper logical notation, there is nothing wrong with the sentence from Wittgenstein's point of view. It can be reformulated using exclusive variables, as recommended by Wittgenstein, as follows: $(\exists x)(Kx \bullet (y) \sim Ky \bullet Bx)$.

in which 'the present king of France is bald' is exhibited as an 'incomplete symbol', corresponding to no single part of the true logical form of the proposition.

Thus, in showing how a logical notation can reveal the true logical form of a proposition, Russell contributed to the project of clarification announced in 4.112:

The object of philosophy is the logical clarification of thoughts.

Philosophy is not a theory but an activity.

A philosophical work consists essentially of elucidations.

The result of philosophy is not a number of 'philosophical propositions', but to make propositions clear.

Philosophy should make clear and delimit sharply the thoughts which otherwise are, as it were, opaque and blurred.

This interpretation of 'Russell's merit' is virtually taken for granted in the secondary literature. It finds expression in Schulte and McGuinness's citation of the following text from Notes on Logic as a precursor to 4.0031: 'Distrust of grammar is the first requisite for philosophizing' (Wittgenstein: 1989: 41). In the Notes on Logic, that sentence is almost immediately followed by 'Philosophy is the doctrine of the logical form of scientific propositions (not only of primitive propositions)', which is easy to see as an early version of 4.112 (Wittgenstein [1961] 1979: 106).

Nonetheless, while this interpretation has been taken to be obvious by many astute readers of the Tractatus, I will argue (surprise!) that it is mistaken. Showing this, moreover, will not be a matter of merely correcting the reading of one minor comment in the Tractatus; it will shed light both on Wittgenstein's own philosophy, and on what he thought he had learned from his friend and teacher, Russell.4

⁴ The interpretation developed in the main text below agrees with the 'obvious' interpretation in taking Wittgenstein to be referring to Russell's theory of definite descriptions. However, Wittgenstein was also deeply influenced by the broader Russellian notion of an 'incomplete symbol', and especially by Russell's analysis of terms for classes as incomplete symbols. This contextual definition of classes achieved an ontological economy greater than that permitted by the theory of descriptions. Russell analysed any simple predication with a definite description as subject into a sentence entailing the existence of something satisfying the description. But a simple predication with a class term as subject is analysed by Russell into a sentence which quantifies only over individuals and propositional functions, and entails the existence of no classes. There is evidence that Wittgenstein wanted to use this analysis as a model for an analysis of terms for complexes as incomplete symbols, presumably resulting in a similar ontological economy (see Tractatus 2.0201, 3.24). In the 1914-16 Notebooks, he scrawled versions of Russell's analysis of classes at several places. (Anscombe omitted them, along with various other 'passages of symbolism',

II. Problems with the obvious interpretation

The 'obvious' interpretation faces three main difficulties, which will provide criteria of adequacy for the alternative interpretation that I will develop in this chapter. First, the interpretation does not really explain why *Russell* is credited with 'Russell's merit', as opposed to Frege (among others).⁵ Second, the interpretation links 4.0031 to 4.002, but only by leap-frogging over 4.003, to which, according to the numbering scheme of the *Tractatus*, 4.003 is appended as a comment. Third, the interpretation does not make clear in what way Russell has really contributed to the idea of a *critique* of language, as 4.0031 suggests. I now take these up in turn.

A. Why not Frege?

Gregory Landini, in his recent study of Wittgenstein's Apprenticeship with Russell, remarks of Wittgenstein's praise of Russell's merit (2007: 227):

Structure is central to logical form and logical analysis. Wittgenstein held that 'It was Russell who performed the service of showing that the apparent logical form of a proposition need not be its real one' (TLP 4.0031). This overreaches. The notion

from the first edition of the *Notebooks* on the grounds that 'nothing could be made of them', but included photocopies of the relevant extracts at the end of the second edition (Wittgenstein [1961] 1979: 1, 133ff)). Wittgenstein's experiments with Russell's theory of classes at times occur cheek-by-jowl with ruminations on the analysis of complexes. For example, the entry for 5.9.14 begins with a formula ' $\varphi(a)$. $\varphi(b)$. $aRb = Def \varphi[aRb]$ ', commonly taken as an attempt at a contextual analysis of the complex-term 'aRb' ('a in relation R to b') (Wittgenstein [1961] 1979: 4). This is followed immediately by two formulas, the second of which $(\Phi(2\psi z) = Def. \varphi x \equiv_x \psi x. \supset_{\varphi} \Phi \varphi)$ is a version of Russell's analysis of class terms (Wittgenstein [1961] 1979: 133). After some discussion of class identity, Wittgenstein turns in the entry for 7.9.14 to the general problem of analysable and unanalysable subject—predicate sentences. At the end of this entry he again writes a version of the contextual analysis of classes:

$$a \in \hat{z} \ (\varphi z)$$
. = Def. $\varphi x \equiv_x \psi x$. $\supset a \in \varphi$.

Such examples show the importance of the analysis of classes for Wittgenstein.

I believe that similar points to those developed in this chapter for the theory of descriptions can be made for Russell's use of the theory of classes to unmask such philosophical puzzles as that of 'the one and the many', the status of the axiom of infinity, and the Russell paradox, as ultimately depending on a 'confusion of types' (*Introduction to Mathematical Philosophy*, 1920: 135). Matters are made more complex, however, by the fact that Wittgenstein criticizes Russell's explanation of this fundamental form of logical confusion as itself embodying similar confusions in a more subtle form (3.331–3.333). I therefore set aside discussion of these matters for possible future work. Useful discussions can be found in Ishiguro, 'Wittgenstein and the Theory of Types' (1981), and Jolley, *The Concept 'Horse' Paradox*, (2007: ch. 3).

⁵ Cora Diamond makes this point in her 'Throwing Away the Ladder' (1995a: 186–7). However, her response to this question, while illuminating in important ways, presupposes a 'standard' reading of 4.0031 and hence leaves dangling the next two questions. My own response to those questions is nonetheless deeply indebted to her work.

is also found in Frege's analysis of cardinal number and in the work of many others. Russell's 1905 theory of descriptions simply offered a new tool for research. It was certainly an important tool. Ramsey aptly described the theory of definite descriptions as 'a paradigm of philosophy'.

Landini here presupposes the 'obvious' interpretation of 'Russell's merit' and points out, quite correctly, that on this interpretation Russell's special contribution has been exaggerated.⁶ Frege certainly had already made clear the point that sentences with similar grammatical form might have radically different logical forms. In section 3 of his Begriffsschrift, Frege rejected the distinction between subject and predicate as irrelevant to logic (1972: 112):

A distinction between *subject* and *predicate* does not occur in my way of representing a judgment.... here the only thing considered in a judgment is that which influences its possible consequences. Everything necessary for correct inference is fully expressed; but what is not necessary usually is not indicated; nothing is left to guessing.... In my first draft of a formula language, I was misled by the example of language into forming judgments by combining subject and predicate. I soon became convinced, however, that this was an obstacle to my special goal and led only to useless prolixity.

Frege rejected the idea that 'Nuel Belnap is bald' and 'Philosophers are bald' have, in any interesting sense, similar (subject-predicate) logical form. He showed (section 12) how to represent 'All X's are P's', 'No X's are P's', and 'Some X's are P's' as (in Russell's notation) ' $(x)(Xx \supset Px)$ ', ' $(x)(Xx \supset Px)$ ',

⁶ An anonymous referee suggests that while Landini follows the 'obvious' reading of 4.0031, nonetheless, Landini's main argument, 'that Wittgenstein in the Tractatus had taken up Russell's methodology but pushed it farther than Russell himself had', comports with my interpretation of 4.0031. However, there are important differences between my understanding of Russell's influence on Wittgenstein and Landini's, some of which are highlighted in Peter Sullivan's recent (2010) review of Landini's book. First, Landini tends to read everything in the Tractatus as reflecting Russell's influence, even explaining Wittgenstein's remarks on ethics and the mystical in this fashion (Landini 2007: 94-100; Sullivan 2010: 101). In contrast, I have written extensively elsewhere of Frege's influence on the Tractatus ('Contextualism and Holism' (1997)) and have appealed to authors like Tolstoy and Angelus Silesius to elucidate Wittgenstein's views on ethics and the mystical ('To What Extent is Solipsism a Truth?' (2004)). Second, Landini takes a negative view of the Tractatus's ambition and accomplishment—as Sullivan puts it, 'Wittgenstein's ideas in the *Tractatus* can be divided into two kinds. The first are the ideas he took over from Russell. The second are the empty posturings of an ambitious but incompetent student' (Sullivan 2010: 101). In contrast, I have a more positive assessment of Wittgenstein's early work, which is not to say that I hold it to be beyond criticism. Finally, Landini dismisses 'therapeutic' readings of the Tractatus (2007: 1-3, 103-6), whereas I have defended such readings at length ('The Purpose of Tractarian Nonsense' (2001), 'The Cardinal Problem of Philosophy' (2007)), and in the present chapter argue that Wittgenstein's therapeutic method in the Tractatus builds on aspects of Russell's philosophical achievement.

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and ' \sim (x)(Xx $\supset \sim Px$)' respectively. He insisted on distinguishing sharply between subsumption of an object under a concept, and subordination of one concept under another. Thus he would represent 'Nuel Belnap is bald' as a case of subsumption,

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while representing 'All philosophers are bald' as a case of subordination,

$$(x)(Px\supset Bx).$$

Frege provided exactly the same analyses of the 'denoting phrases' 'a man', 'some man', 'any man', 'every man', 'all men', and 'no men' as did Russell twenty-six years later in 'On Denoting'. Frege also anticipated Russell's doctrine of incomplete symbols, writing (1972: section 9, 128):

... 'the number 20' and 'every positive integer' are not concepts of the same rank.... The expression 'every positive integer' by itself, unlike 'the number 20', yields no independent idea; it acquires a sense only in the context of a sentence.

From this point of view, the only thing Russell added to Frege's pioneering logical analyses was the specific move of treating definite descriptions in the same way Frege had already showed how to treat other denoting phrases.

Hence, on the 'obvious' interpretation, Wittgenstein exaggerated 'Russell's merit' at the expense of the earlier claim of the 'great works of Frege'. This provides a first criterion for a better interpretation of 4.0031: we need to isolate a particular merit due to Russell, rather than any of his predecessors.

B. What is the connection to nonsense?

A further difficulty with the 'obvious' interpretation of Russell's merit involves the placement of the key remark 4.0031 in the text. The 'obvious' interpretation ties Russell's merit to 4.002 and the project of uncovering the 'true form' of the thought hidden under the 'external form' of the 'clothing' of language. However, according to the numbering system of the Tractatus, 4.0031 is a comment not on 4.002, but on the intervening remark 4.003:

Most propositions and questions, that have been written about philosophical matters, are not false, but nonsensical [unsinnig]. We cannot, therefore, answer questions of this kind at all, but only state their nonsensicality. Most questions and propositions of the philosophers result from the fact that we do not understand the logic of our language.

(They are of the same kind as the question whether the Good is more or less identical than the Beautiful.)

And so it is not to be wondered at that the deepest problems are really *no* problems.

Wittgenstein states here one of the fundamental themes of the *Tractatus*. In the Preface, he makes the claim to have 'finally' solved the 'problems of philosophy' in essentials' by showing 'that the method of formulating these problems rests on the misunderstanding of the logic of our language'. In 4.003, he reiterates this diagnosis of the problems of philosophy, and concludes that they are not really problems at all. (He also parenthetically provides a striking, not to say bizarre, example of such a problem, to which we shall return below.) However, on the 'obvious' interpretation, it is completely unclear what Russell's merit has to do with the nonsensicality of philosophical propositions. This provides a second criterion of adequacy on our interpretation of 'Russell's merit'—the link to the discussion of philosophical nonsense in 4.003 must be made clear.

C. Why 'Critique of language'?

Finally, the 'obvious' interpretation of Russell's merit does not adequately explain the way in which the two parts of 4.0031 are connected. Proposition 4.0031 begins by proclaiming that 'All philosophy is "Critique of language" and then moves directly to the value of Russell's having shown 'that the apparent logical form of the proposition need not be its real form'. The obvious interpretation understands Russell as having contributed an important tool to be used in a project of clarification of the propositions that are expressed obscurely in ordinary language. However, such a project of clarification can only count as a 'critique of language' in a fairly weak and uninteresting sense.

Wittgenstein's appeal to the notion of 'critique' has an obvious Kantian ring.⁷ In the Introduction to the *Critique of Pure Reason*, Kant says of his critical project that (1998: A11/B25):

⁷ He mentions Mauthner's idea of a 'critique of language' only to distance his own critique from it. I will not discuss Mauthner in this chapter.

... its utility in regard to speculation would really be only negative, serving not for the amplification but only for the purification of our reason, and for keeping it free of errors, by which a great deal is already won.

Thus critique has both a clarificatory aim (the 'purification' of reason), but also a more purely negative goal of preventing or eliminating errors. These two dimensions of the Kantian idea of critique are echoed in Wittgenstein's summation of 'the whole sense' of the *Tractatus*: 'What can be said at all can be said clearly; and whereof one cannot speak, thereof one must be silent.' Of course, the Kantian project is associated with the idea of setting limits to thought, a goal which Wittgenstein embraces in the Preface to the *Tractatus*, but only subject to a well-known caveat:

The book will therefore draw a limit to thinking, or rather—not to thinking, but to the expression of thoughts; for in order to draw a limit to thinking we should have to be able to think both sides of this limit (we should therefore have to be able to think what cannot be said).

The limit can, therefore, only be drawn in language and what lies on the other side of the limit will be simply nonsense.

Thus, the *Tractatus* does engage in a critical project of establishing the limits of language, but only by demonstrating that what lies beyond those limits is 'simply nonsense'. In addition to the clarificatory role of 'elucidations' in philosophy mentioned at 4.112, there is the critical role of 'elucidations' which are to be recognized as nonsensical, specified in the notorious 6.54: 'My propositions are elucidatory in this way: he who understands me finally recognizes them as nonsensical...' These reflections provide us with a third criterion of adequacy on our interpretation of 'Russell's merit': we must show how Russell contributes to this project of the 'Critique of language' (which constitutes 'all philosophy'), in both its clarificatory and its negative (or therapeutic) aspects.

III. Towards a correct interpretation: Wittgenstein's conception of philosophical problems

In order to approach the goal of a more satisfying interpretation of 'Russell's merit', I want to sketch what Wittgenstein means by 'nonsense' in the

Tractatus.⁸ I will first briefly discuss two major sources of inspiration for Wittgenstein's conception of philosophical nonsense: Hertz and Frege. In the following section, I will turn directly to the text of the *Tractatus*. This preliminary work will then inform my interpretation of 'Russell's merit' and its significance in the final three sections.

A. Hertz

Hertz's influence on Wittgenstein has been widely discussed, and what I say here makes no pretense to originality. Wittgenstein apparently read Hertz's *Principles of Mechanics* as a teenager. He found inspiration in Hertz's discussion of the concept of 'force' in the Introduction to that work. Hertz begins by raising a problem concerning Newton's three laws of motion (1993: 5–6):¹⁰

It is really wonderful how easy it is to attach to the fundamental laws considerations which are quite in accordance with the usual modes of expressions in mechanics, and which yet are an undoubted hindrance to clear thinking.... We swing in a circle a stone tied to a string, and in so doing we are conscious of exerting a force upon the stone....the actual motion of the stone is always in accordance with Newton's second law. But now the third law requires an opposing force to the force exerted by the hand upon the stone. . . . the usual explanation is that the stone reacts upon the hand in consequence of centrifugal force...Is what we call centrifugal force anything else than the inertia of the stone? Can we, without destroying the clearness of our conceptions, take the effect of inertia twice into account,—firstly as mass, secondly as force? In our laws of motion, force was a cause of motion, and was present before the motion. Can we, without confusing our ideas (ohne unsere Begriffe zu verwirren), suddenly begin to speak of forces which arise through motion, which are a consequence of motion? . . . The only possible explanation is that, properly speaking, centrifugal force is not a force at all. . . . But, what now becomes of the demands of the third law, which requires a force exerted by the inert stone upon the hand, and which can only be satisfied by an actual force,

⁸ My understanding of Wittgenstein on nonsense has been deeply shaped by the work of Cora Diamond and James Conant. See, for example, 'Throwing Away the Ladder' (1995a) and 'The Method of the *Tractatus*' (2002) respectively. More recently, I have also found Oskari Kuusela, *The Struggle against Dogmatism* (2008), to be extremely helpful.

⁹ See, for example, Janik and Toulmin, *Wittgenstein's Vienna* (1973); Hacker, *Insight and Illusion* (1986); McGuinness, *Wittgenstein: A Life* (1988); Monk, *Ludwig Wittgenstein: The Duty of a Genius* (1990); etc.

¹⁰ I have been helped here by L. Susan Stebbing, 'Language and Misleading Questions' (1939), and J. J. C. Smart, 'Heinrich Hertz and the Concept of Force' (1951).

not a mere name? . . . The force spoken of in the definition and in the first two laws acts upon a body in one definite direction. The sense of the third law is that forces always connect two bodies, and are directed from the first to the second as well as from the second to the first. It seems to me that the conception of force assumed and created in us by the third law on the one hand and the first two laws on the other hand, are slightly different.

Hertz here argues that the term 'force' as used in Newton's laws does not have one fixed meaning, and is in fact used in different senses in the first and second laws, on the one hand, and the third law on the other. As a result of this kind of confusion, he says, 'one hears with wearisome frequency, that the nature of force is still a mystery, that one of the chief problems of physics is the investigation of the nature of force, and so on' (1993: 7). Hertz diagnoses these questions as the expression of a 'confused wish' (1993: 7-8):11

... why is it that people never in this way ask what is the nature of gold, or what is the nature of velocity? Is the nature of gold better known to us than that of force? Can we by our conceptions, by our words, completely represent the nature of any thing? Certainly not. I fancy the difference must lie in this. With the terms 'velocity' and 'gold' we connect a large number of relations to other terms; and between all these relations we find no contradictions which offend us. We are therefore satisfied and ask no further questions. But we have accumulated around the term[s] 'force'...more relations than can be completely reconciled amongst themselves. We have an obscure feeling of this and want to have things cleared up. Our confused wish finds expression in the confused question as to the nature of force . . . But the answer which we want is not really an answer to this question. It is not by finding out more and fresh relations and consequences that it can be answered; but by removing the contradictions existing between those already known, and thus perhaps reducing their number. When these painful contradictions are removed, the question as to essence will not have been answered; but our minds, no longer vexed, will cease to ask illegitimate questions.

When we ask after the *nature* of force, this is a confused (*unklaren*, unclear) question expressing a confused wish, generated by the fact that our term (Zeichen, sign) 'force' is related to other terms in multiple and contradictory ways. The term 'force' does not have one fixed sense. This results in 'painful contradictions'. The solution is to remove the contradictions by reducing

¹¹ I have emended the translation slightly.

the number of relations in which the term 'force' stands—in effect by determining a single meaning for the term 'force'. Once this is done, we will no more seek to know the nature of force than we do the nature of velocity or gold.¹²

Wittgenstein was profoundly influenced by Hertz's diagnosis, and dissolution, of the problem of the 'nature of force'. This influence shaped his conception of philosophy throughout his career. At one point he chose the last sentence of the paragraph quoted above as a motto for the Philosophical Investigations: 'When these painful contradictions are removed, the question as to essence will not have been answered; but our minds, no longer vexed, will cease to ask illegitimate questions.'13 Philosophical problems, for Wittgenstein, were such 'illegitimate questions'. In the Investigations, he characterized them as 'problems arising through a misinterpretation of our forms of language'. 14 Such problems 'have the character of depth. They are deep disquietudes (tiefe Beunruhigungen) . . . ' which result when 'a simile that has been absorbed into the forms of our language produces a false appearance, and this disquiets (beunruhigt) us' (2001a: §§111-12). The term 'disquietudes' (Beunruhigungen) was already one of Wittgenstein's favourite expressions for philosophical problems and puzzlement by the early 1930s—a fact that is obscured to English-language readers by the many different terms his translators have used for the one noun 'Beunruhigungen' and the one verb 'beunruhigt' ('worries', 'uneasiness', 'dissatisfaction', 'troubles', etc.). In the Big Typescript (1933) Wittgenstein explicitly connects this conception to Hertz: 'As I do philosophy, its entire task is to shape expression in such a way that certain worries (Beunruhigungen) disappear. ((Hertz.)).' (2005: 310). Similarly, in the *Philosophical Grammar*, Wittgenstein tells us that 'philosophy isn't anything except philosophical problems, the particular individual worries (Beunruhigungen) that we call "philosophical problems", whose 'characteristic feature... is that a confusion (Verwirrung) is expressed in the

¹² Hertz implements this programme by presenting a system of mechanics in which the only primitive notions are time, space, and mass. He then introduces the term 'force' through a nominal definition relatively late in the work.

¹³ 'Sind diese schmerzenden Widersprüche entfernt, so ist zwar nicht die Frage nach dem Wesen beantwortet, aber der nicht mehr gequälte Geist hört auf, die für ihn unberechtige Frage zu stellen' (2001b: 565).

¹⁴ In the *Investigations*, Wittgenstein still occasionally speaks, in the terms favoured in the *Tractatus*, of 'misunderstanding of the *logic* of our language' as the root of philosophical puzzlement. See 2001a: §\$93 and 345.

form of a question that doesn't acknowledge the confusion, and that what releases the questioner from his problem is a particular alteration of his method of expression' (1974: §141).

The disquietudes that constitute the problems of philosophy arise from 'confusion', which, according to Hertz, manifests itself in the form of apparent contradictions. These contradictions arise from the fact that we do not use our words in one fixed sense. At a meeting of the Cambridge Moral Sciences Club in 1939, Rush Rhees remarked that 'puzzlement often occurs when there is a conflict of uses'. The minutes of the meeting continue (Wittgenstein 2003: 379):

Dr. W: this is often called a contradiction. He cited a passage from Hertz's Principles of Mechanics, in which the latter said that people ask about the essence of matter, etc., because a lot of defining criteria have been heaped on these notions, & these criteria are in conflict. This irritates our mind, & makes us ask 'what is the essence of so & so?' The answer is not given by further criteria, but by giving less criteria. When these contradictions are avoided, the question is not answered, but the mind is no longer perplexed and ceases to ask it. Dr W said that he must confess that this passage seemed to him to sum up philosophy.

Here 'philosophy' is summed up in both a negative and a positive way: negatively, philosophical problems are cases of puzzlement arising from confusion, and positively, philosophical work can lead to the avoidance of this puzzlement. This release from philosophical puzzlement comes from a modification of our form of expression, which enables us to see the source of the apparent contradictions in the confused form of speaking fostered by our language.

B. An example: Augustine on time

It will be helpful to provide an example of a philosophical problem and a Wittgensteinian diagnosis of that problem as a case of puzzlement arising from linguistic confusion. One such problem to which Wittgenstein returned repeatedly is Augustine's puzzlement about time in Book XI of the Confessions. 15 Augustine famously wrote: 'What is time? . . . If no one asks

¹⁵ Oskari Kuusela catalogues six separate occasions on which Wittgenstein discusses this problem in his manuscripts and notebooks (2008: 294, n. 44).

me, I know; if I want to explain it to someone who asks me, I do not know' (Augustine 1997: Book XI, ch. 17 (14), 232). In the *Blue Book*, Wittgenstein provides one of his most extended discussions of Augustine's predicament, explicitly mentioning Hertz's *Principles of Mechanics* as a model for his account ([1960] 1965, 26ff). He describes Augustine's question 'What is time?', which appears to ask for a definition, as 'an utterance of unclarity, of mental discomfort', which arises because 'in fact it is the grammar of the word "time" which puzzles us'. This puzzlement 'arises from what one might call apparent contradictions in the grammar'. Augustine (1997: Book XI, chs 18ff (15ff), 233ff) had argued in this vein: 16

How is it possible that one should measure time? For the past can't be measured, as it is gone by; and the future can't be measured because it has not yet come. And the present can't be measured for it has no extension.

Wittgenstein diagnoses the apparent contradiction here as 'a conflict between two different usages of a word, in this case the word "measure": we speak of 'measuring a *length*' and of 'measuring time'. The use of the same word, 'measure', leads us to think of the latter as like the former. We then envisage the measurement of time as like the measurement of 'the distance between two marks on a travelling band which passes us, and of which we can only see a tiny bit (the present) in front of us'. Given this picture, it becomes impossible to understand how it is possible to measure anything more than the present instant. This diagnosis of the problem also points to its solution:

Solving this puzzle will consist in comparing what we mean by 'measurement' (the grammar of the word 'measurement') when applied to a distance on a travelling band with the grammar of that word when applied to time.

Wittgenstein concludes his discussion by remarking that the problem is in fact extremely difficult, in spite of the apparent ease with which it can be solved, 'due to the fascination which the analogy between two similar structures in our language can exert on us'.

Augustine was a philosopher for whom Wittgenstein had the deepest respect, and in his final discussion of this problem, in the *Philosophical*

¹⁶ The quotation is Wittgenstein's paraphrase of Augustine's argument.

Investigations, Wittgenstein attributes to him an awareness of the proper route to its solution (2001a: sections 89-90):17

Something that we know when no one asks us, but no longer know when we are supposed to give an account of it, is something that we need to remind ourselves of.... We remind ourselves, that is to say, of the kind of statement that we make about the phenomena. Thus, Augustine recalls to mind the different statements that are made about the duration, past present or future, of events. . . . Our investigation is therefore a grammatical one. Such an investigation sheds light on our problem by clearing misunderstandings away. Misunderstandings concerning the use of words, caused, among other things, by certain analogies between the forms of expression in different regions of language.—Some of them can be removed by substituting one form of expression for another; this may be called 'analysis' of our forms of expression, for the process is something like one of taking a thing apart.

The 'analysis' that Wittgenstein promotes is a 'taking apart' of our confusing and confused way of speaking through perspicuously representing and distinguishing the distinct concepts and relations that have become muddled in our discourse. Once this 'analysis' is carried out, our 'deep disquietudes' will vanish and we will be able to achieve philosophical peace.

C. Frege¹⁸

At this point, however, my readers may already have become quite impatient with me. 'All of these pages on Hertz and the sources of philosophical puzzlement may be quite interesting', I hear them say. 'But we began with a textual question about the Tractatus. Surely what you have just done is to summarize for us (a part of) the philosophical method of the later Wittgenstein. What does all this have to do with the Tractatus, and Russell?'

It is true that all of the passages from Wittgenstein above are drawn from his middle to late works. But Wittgenstein encountered Hertz's ideas even before he became a student of Russell's, and it is my contention that the

¹⁷ See James Wetzel, 'Time after Augustine' (2005), for illuminating discussion.

¹⁸ On Frege's influence on Wittgenstein, see Diamond, 'What does a Concept-Script Do?' (1995); Weiner, 'Theory and Elucidation' (2001); Conant, 'The Method of the Tractatus' (2002); Goldfarb, 'Wittgenstein's Understanding of Frege' (2002); Reck, 'Wittgenstein's "Great Debt" to Frege' (2002); Ricketts, 'Wittgenstein against Frege and Russell' (2002); Jolley, The Concept 'Horse' Paradox (2007); and especially Diamond, 'Inheriting from Frege' (2010). Diamond, in the last-mentioned essay, points out the Fregean character of many of Wittgenstein's criticisms of Frege. In a similar vein, I argue in section VI below that Wittgenstein's criticisms of Russell are often to be understood as in some sense Russellian in character.

conception of philosophical problems and their solution that he found in Hertz was crucial to his approach to philosophy from the beginning. However, the precise *form* that this conception took in the *Tractatus* was decisively shaped by 'the great works of Frege and the writings of [Wittgenstein's] friend Bertrand Russell'. This chapter is primarily about '*Russell's* merit', and indeed I have set as a criterion of adequacy for my account that it allow us to separate out a distinctively Russellian contribution to the *Tractatus*'s approach to philosophical nonsense. Nonetheless, we should not discount entirely Frege's contribution.

In the Preface to his *Begriffsschrift*, Frege indicates that he was motivated to construct his new 'concept-script' in order to determine the epistemological status of arithmetic, by constructing as far as possible 'gap-free' proofs in which any dependence on Kantian intuition would be either ruled out or made apparent. However, he also saw a more general use for his new logical language in philosophy (1972: 106):

If it is a task of philosophy to break the power of the word over the human mind, uncovering illusions which through the use of language often almost unavoidably arise concerning the relations of concepts, freeing thought from that which only the nature of linguistic means of expression attaches to it, then my 'conceptual notation', further developed for these purposes, can become a useful tool for philosophers.

Frege was concerned in particular with confusions of logical category, such as confusion of *concept* and *object*. In an early essay 'On the Scientific Justification of a Conceptual Notation' (1882), he explains (1972: 84):

Language proves to be deficient, however, when it comes to protecting thought from error. It does not even meet the first requirement which we must place on it in this respect: namely, being unambiguous. The most dangerous cases are those in which the meanings of a word are only slightly different, the subtle and yet not unimportant variations. Of the many examples only one frequently recurring phenomenon may be mentioned here: the same word may serve to designate a concept and a single object which falls under that concept.

Frege provides an example: we may use the expression 'the horse' both to designate a particular animal, and to designate the species to which it belongs.

While such an ambiguity may seem completely harmless, Frege set out as one of his three fundamental principles in his Foundations of Arithmetic 'never to lose sight of the distinction between concept and object' (1980a: x), and in that work he repeatedly criticized other philosophers for confusing these two fundamentally different logical functions. While 'language makes use of proper names, for instance Moon, as concept words and vice-versa' (1980a: 64), we should not fall into the mistake of calling 'a general concept word the name of a thing. That leads straight to the illusion that number is a property of a thing' (1980a: 63). Such a view is supported by linguistic usage—'we speak of "the number of the bales" just as we do of "the weight of the bales" suggesting that number and weight are equally properties of the bales. But 'this usage is confusing' (verwirrend)—(1980a: 64) and, as Frege has argued earlier in the book, leads to apparent contradictions.

If I give someone a stone with the words: Find the weight of this, I have given him precisely the object he is to investigate. But if I place a pile of playing cards in his hands with the words: Find the Number of these, this does not tell him whether I wish to know the number of cards, or of complete packs of cards, or even say of points in the game of skat. To have given him the pile in his hands is not yet to have given him the object he is to investigate; I must add some further word—cards, or packs, or points.

Consequently, if we insist that number is a property of objects, we will have to hold that the same object can have distinct, incompatible number properties; but 'an object to which I can ascribe different numbers with equal right is not really what has a number' (1980a: 28-9).

Frege diagnoses a similar pattern—in which confusion of concept and object leads to contradictory claims and hence to philosophical puzzlement—in his critique of the view that a number is a set or plurality of 'units' (Einheiten). At the root of this view is again misleading linguistic usage: 'under the influence of the grammatical form, we are regarding "one" as a word for a property and taking "one city" in the same way as "wise man". Such a view again leads to contradictions: 'Whereas we can combine "Solon was wise" and "Thales was wise" into "Solon and Thales were wise", we cannot say "Solon and Thales were one" (1980a: 39-40). Such difficulties lead us back to considering 'units' as objects, which are somehow combined to form a number. In doing so we end up confounding the concept-word 'unit' (Einheit) and the proper name 'one' (Eins). 'When

we speak of "the number one" we indicate by means of the definite article a definite and unique object of scientific study. There are not divers numbers one, but only one. In I we have a proper name, which as such does not admit of a plural...' In contrast, 'only concept words can form a plural. If, therefore, we speak of "units", we must be using the word not as equivalent to the proper name "one", but as a concept word' (1980a: 49-50). So, 'if confusion (Verwirrung) is not to become worse confounded, it is advisable to observe a strict distinction between unit and one' (1980a: 48-9).

Nonetheless, there is a great temptation to allow the confusion of concept and object to influence our thinking (1980a: 50-1):

We are faced . . . with the following difficulty:

If we try to produce the number by putting together different distinct objects, the result is an agglomeration in which the objects contained remain still in possession of precisely those properties which serve to distinguish them from one another; and that is not the number.

But if we try to do it in the other way, by putting together identicals, the result runs perpetually together into one and we never reach a plurality....

The word 'unit' is admirably adapted to conceal this difficulty; and that is the real, though no doubt unconscious reason why we prefer it to the words 'object' and 'thing'. We start by calling the things to be numbered 'units', without detracting from their diversity; then subsequently the concept of putting together...transforms itself into that of arithmetical addition, while the concept word 'unit' (Einheit) changes unperceived into the proper name 'one' (Eins). And there we have our identity. If I annex to the letter a first an n and then a d, anyone can easily see that that is not the number 3. If, however, I bring the letters a, n, and d under the concept 'unit', and now, instead of 'a and n and d' say 'a unit and a unit and a further unit' (eine Einheit und eine Einheit und noch eine Einheit) or 'I and I and 1', we are quite prepared to believe that this does give us the number 3. The difficulty is so well hidden under the word 'unit', that those who have any suspicion of its existence must surely be few at most.

Here, indeed, is an artful manipulation of language worthy of Mill's censure; for this is no outward manifestation of an inward process of thought, but only the illusion of one.

This 'artful manipulation of language' is made possible by the ambiguity exhibited by the word 'unit' (Einheit), which is one of those 'most dangerous cases...in which the meanings of a word are only slightly different, the subtle and yet not unimportant variations'. Frege's Begriffsschrift provides 212

a notation in which such cases are ruled out by the structure of the language. In the *Begriffsschrift* there can be no word like 'unit', 'admirably adapted to conceal difficulties', which 'changes unperceived' from a meaning as a concept-word to a meaning as a proper name. Frege repeatedly points out that the *Begriffsschrift*, by design, respects the distinction between concept (or function) and object. Comparing his notation to that of Boole, the early Frege writes (1980b: 12):

...in the *Begriffsschrift* their designations [the designations of concepts] never occur on their own, but always in combinations which express judgeable contents.... A sign for a property never appears without a thing to which it might belong at least indicated... (from a manuscript written in 1880/1)

Drawing a similar comparison to Peano's logical notation, the mature Frege says (1984: 248):

I distinguish function-letters from object-letters, using the former to indicate only functions and the latter to indicate only objects, in conformity with my sharp differentiation between functions and objects, with which Mr. Peano is unacquainted. (originally published in 1897)

This idea of a *Begriffsschrift*, a 'conceptual notation' in which the 'dangerous cases' of ambiguity, the 'subtle and yet not unimportant variations' could be ruled out *de jure*, was determinative for Wittgenstein's reception of Hertz's view of philosophical problems in the *Tractatus*, to which we now turn.

IV. The Tractatus on nonsense

Our task now is to develop an interpretation of the *Tractatus*'s critique of philosophical nonsense that will enable us to see why it was '*Russell*'s merit to have shown that the apparent logical form of the proposition need not be its real form'

A. Sign and symbol

Both Hertz and Frege emphasized the way in which confusion and equivocation make possible philosophical puzzlement. In the *Tractatus*, Wittgenstein employs a distinction between *sign* (*Zeichen*) and *symbol* to spell out this thought:

- 3.31 Every part of a proposition which characterizes its sense I call an expression (a symbol).
- 3.32 The sign is the part of the symbol perceptible by the senses.

As I understand this distinction, a sign is a mark, inscription, or noise that we put to use in language, in propositions that have sense; a symbol is the sign taken together with this use. I therefore take symbols to be essentially meaningful, and to have the meaning that they have essentially. ¹⁹ Equivocation then arises when we have one sign used in two symbols:

3.321 Two different symbols can therefore have the sign (the written sign or the sound sign) in common—they then signify in different ways.

¹⁹ Colin Johnston has recently argued for a different interpretation of the sign/symbol distinction ('Symbols in Wittgenstein's *Tractatus*' (2007)). Johnston argues that 'a Tractarian symbol, whilst essentially a syntactic entity to be distinguished from the mark or sound that is its sign, bears its semantic significance only inessentially'. According to Johnston, a symbol is a sign for which a determinate syntactic category has been specified, which can then bear a multiplicity of determinate meanings. Johnston cites textual evidence for this reading, including 3.323: 'In the proposition "Green is green"—where the first word is a proper name and the last an adjective—these words have not merely different meanings but they are *different symbols*.'

Johnston's reading would rule out the interpretation that I develop of Wittgenstein's conception of nonsense in the *Tractatus*. I hope to address Johnston's reading in detail in future work. Suffice it to say here that I find neither his textual evidence nor his philosophical arguments convincing. Among other things, his reading conflicts with things Wittgenstein said on his return to philosophy about the sign/symbol distinction. For example, G. E. Moore reports Wittgenstein as flatly stating that 'signs with different meanings must be different symbols' (*Philosophical Occasions*, 1993: 56). According to King and Lee's notes, Wittgenstein said that 'When we explain the meaning of a sign, we are describing the symbol, not transcending it, the meaning is part of the symbol' (*Wittgenstein's Lectures: 1930–32*, 1982: 28). Furthermore, in 'Some Remarks on Logical Form', Wittgenstein provides a close paraphrase of *Tractatus 3.323–5*, but replaced the *Tractatus*'s talk of signs and symbols with talk of ambiguity and multiple meaning: 'where ordinary language disguises logical structure, where it allows the formation of pseudopropositions, where it uses one term in an infinity of different meanings, we must replace it by a symbolism which gives a clear picture of the logical structure, excludes pseudopropositions, and uses its terms unambiguously' (1993: 29–30). On Johnston's interpretation, Wittgenstein in the late 20s and early 30s must have changed his mind about the sign/symbol distinction. This seems implausible.

Johnston's use of direct textual evidence from the *Tractatus* is also selective and misleading. For example, he cites 3.341 in support of his reading: 'What is essential in a proposition is not what all propositions that express the same sense have in common—namely, its sense—but rather what all propositions that can express the same sense have in common—namely, the form of its sense. And generally, what is essential in a symbol is what all symbols have in common that can, and not do, serve the same purpose. For example, what is essential to a name is what all names that can stand for its referent have in common, and this is the form of that object. A name can stand for any object whose form it has: it contains the form, but not the content, of its referent.' But Johnston does not cite 3.3411—'One could therefore say the real name is that which all symbols which signify an object, have in common'—in which the word 'can' is conspicuously absent.

Wittgenstein remarks (3.323) that such equivocation is common 'in the language of everyday life' in which

...it very often happens that the same word signifies in two different ways—and therefore belongs to two different symbols...Thus the word 'is' appears as the copula, as the sign of equality, and as the expression of existence...we speak of *something* but also of the fact of *something happening*.

(In the proposition 'Green is green'—where the first word is a proper name and the last an adjective—these words have not merely different meanings but they are different symbols.)

This equivocation is responsible for philosophical confusion (3.324):

Thus there easily arise the most fundamental confusions (of which the whole of philosophy is full).

Wittgenstein here focuses on the 'dangerous cases' of equivocation, the 'subtle and yet not unimportant variations' that Frege saw as leading to philosophical confusion—Wittgenstein's last example ('Green is green') involves precisely the concept/object equivocation against which Frege inveighed. But he adds a further form of equivocation to the catalogue of sources of philosophical puzzlement. Not only do we frequently have one word being used in two symbols, we also have cases in which (3.323)

two words, which signify in different ways, are apparently applied in the same way in the proposition.... Thus.... 'to exist' [appears] as an intransitive verb like 'to go'; 'identical' as an adjective...

In such cases, two signs with the same apparent grammatical form signify in different ways, and so have different real or logical form. One could say that in such cases it is not so much the signs that are ambiguous as it is the grammatical forms of the language itself.²⁰

Wittgenstein again follows Frege in recommending the adoption of a *Begriffsschrift* as a linguistic purgative, eliminating these dangerous confusions:

3.325 In order to avoid these errors, we must employ a symbolism which excludes them, by not applying the same sign in different symbols and by not applying signs

²⁰ It is worth noting that in the *Prototractus* manuscript, the middle paragraph of what becomes *Tractatus* 3.323 and 3.324, are inserted between what becomes *Tractatus* 4.002 and 4.003. Thus the way in which 'language disguises the thought' and the way in which philosophical questions and problems arise from the 'misunderstanding of the logic of our language' are explicitly linked through the sign/symbol distinction.

in the same way which signify in different ways. A symbolism, that is to say, which obeys the rules of logical grammar—of logical syntax.

(The logical symbolism [Begriffsschrift] of Frege and Russell is such a language, which, however, does still not exclude all errors.)

In such a language, we will not be liable to succumb to tempting confusions that generate philosophical puzzlement, for the equivocations and misleading structures that make these confusions possible will simply not be present. In this way we will avoid the dangers of creating philosophical nonsense.

B. Nonsense and the lack of meaning

There is another important strand in the Tractatus's conception of nonsense which we must now confront, however, and which might seem to come into conflict with the argument as we have developed it so far. According to this strand, nonsense arises simply because we have used words that lack a meaning:

5.4733 Frege says: Every legitimately constructed proposition must have a sense; and I say: Every possible proposition is legitimately constructed, and if it has no sense this can only be because we have given no meaning to some of its constituent parts.

(Even if we believe that we have done so.)21

²¹ I have left off the latter part of this remark, which is another piece of evidence for Colin Johnston's reading of the sign/symbol distinction: 'Thus "Socrates is identical" says nothing, because we have given no meaning to the word "identical" as adjective. For when it occurs as the sign of equality it symbolizes in an entirely different way—the symbolizing relation is another—therefore the symbol is in the two cases entirely different; the two symbols have the sign in common with one another only by accident.' This passage suggests that even without having been given a meaning, there is a symbol, 'identical'-asadjective. This note is not the place for a complete analysis of this passage, but I will note two things here: (a) In the first paragraph of 5.4733, Johnston has to read 'possible proposition' as simply 'proposition'; I can equally read 'symbol' when applied to 'identical'-as-adjective as 'possible symbol'. That is, I can read the last sentence of 5.4733 as follows: 'When "identical" occurs as the sign of equality it symbolizes in an entirely different way from the way in which it would have to symbolize if it occurred as an adjective. Therefore if "identical" had a meaning as an adjective, the two symbols would be entirely different, having only the sign in common by accident. And therefore one should not think that one can recognize the symbol in the sign "identical" (3.326) in the context "Socrates is identical", simply because one knows the meaning of that sign in other contexts.' It seems the text cannot be read completely consistently without making one of these manoeuvres. (b) On the other hand, it is curious that in 3,323 Wittgenstein remarks that in 'in the language of everyday life', "identical" [appears] as an adjective'. It is somewhat difficult to understand what this can mean if not that 'identical' appears with an adjectival meaning. At this point I might be tempted to throw up my hands. But see below on 'identisch' as an adjective in philosophical German.

There is no other, deeper way in which nonsense can arise. Hence, Witt-genstein concludes that if one wants to show that someone is speaking nonsense, there is nothing for it but to show that she has failed to give a meaning to one of her signs:

6.53 The right method of philosophy would be this: To say nothing except what can be said, *i.e.* the propositions of natural science, *i.e.* something that has nothing to do with philosophy: and then always, when someone else wished to say something metaphysical, to demonstrate to him that he had given no meaning to certain signs in his propositions.

The conception of nonsense that I have expounded above, however, might seem to conflict with the present conception, according to which nonsense arises from a lack of meaning. For above I suggested that nonsense arises from confusion and equivocation—which seems to involve not a lack of meaning, but a surfeit. After all, equivocation and ambiguity require that a given sign have multiple meanings, not that it lack meaning altogether. Can these two apparently conflicting views of nonsense be reconciled?

C. Questions and propositions of the philosophers

To resolve this puzzle, I want to return to the example of philosophical nonsense introduced in the passage on which the remark about 'Russell's merit' is a comment, 4.003:

Most propositions and questions, that have been written about philosophical matters, are not false, but nonsensical [unsinnig]. We cannot, therefore, answer questions of this kind at all, but only state their nonsensicality. Most questions and propositions of the philosophers result from the fact that we do not understand the logic of our language.

(They are of the same kind as the question whether the Good is more or less identical than the Beautiful.)

And so it is not to be wondered at that the deepest problems are really *no* problems.

Now what kind of a question *is* this: 'whether the Good is more or less identical than the Beautiful'? While it certainly *sounds* vaguely philosophical, would any philosopher actually ask such a question? It also *sounds* nonsensical—but how would one be led to pose it by misunderstanding the logic of our language?

Here is a kind of 'just so' story about a possible genesis of this bizarre example. Consider Plato's theory of Forms. 22 According to this theory, properties like beauty and goodness are realized in the transient occupants of the temporal realm through those objects participating in eternal Forms of the Beautiful and the Good. So, for each (or at least some) property F, there is a form of F-ness, and in general x is F holds just in case x participates in F-ness. But participation is a matter of degree: things can be more or less beautiful, more or less good, and in general 'x is more F than y' will mean that x participates to a higher degree in F-ness than does y. Now, the Forms themselves are thought of as the things that have F-ness to the highest possible degree: the Beautiful is beautiful, and maximally so, the Good is good, and maximally so, and so on. The forms can thus be predicated of themselves, and to the highest degree. Thus, if x is more good than y, this is because x approximates more closely to the goodness of the Good than does y; and for any x other than the Good, x is less good than the Good.

However, in the *Parmenides*, this doctrine comes under a sustained critical and sceptical attack. Parmenides generates a host of *aporia* concerning the theory of Forms, and some of these have to do with two specific Forms introduced in the dialogue: the Same and the Different. It appears that everything participates in these Forms, since everything is the same (as itself) and different (from everything else). By the principle of self-predication, the Same is the same and the Different is the different, and in each case maximally so; nonetheless the Same is also different (from the Different) and the Different is the same (as itself), so the Same must participate in the Different, and the Different must participate in the Same. Presumably, however, the Same is less Different than the Different (else the Same would be the same as the Different) and the Different is less the same than the Same (for the same reasons).

Now, my point here is not to provide an interpretation of the *Parmenides* or to try to resolve such *aporia* in the Theory of Forms. Rather, for present purposes the important point is that we here have a crude sketch of a philosophical framework in which the question whether the Good is more or less identical (the same) as the Beautiful can arise. Both the Good and the Beautiful are the same (as themselves) and so both participate in the

²² I make no claims to Plato scholarship here. I am working entirely from memory of things I was taught almost thirty years ago, in a graduate seminar on Ancient Philosophy with Alexander Nehamas.

Same; and the question is which of these two Forms, the Good and the Beautiful, participates to a higher degree in the third Form, the Same.

Thus it might appear that we have made some sense out of this strange-seeming question. Yet Wittgenstein presents it as a paradigmatic case of philosophical nonsense. How would he diagnose the error here? At 5.4733, Wittgenstein provides an example of nonsense that arises 'because we have given no *meaning* to some of its constituent parts'—'even if we believe we have done so'. He writes:

Thus 'Socrates is identical' says nothing, because we have given *no* meaning to the word 'identical' as *adjective*. For when it occurs as the sign of equality it symbolizes in an entirely different way—the symbolizing relation is another—therefore the symbol is in the two cases entirely different; the two symbols have the sign in common with one another only by accident.

The fact that no meaning has been given to the word 'identical' as an adjective shows that we should not treat 'identical', or 'the same', as if it were on a par with 'beautiful' or 'good'—as is required by the theory of Forms, according to the argument developed in the *Parmenides*. As an initial, simple diagnosis, one might say that 'beautiful' and 'good' are one-place predicates, while 'identical' is a two-place predicate ('the sign of equality'), and it is a mistake to try to squeeze them both into one logical category, as we do if we speak of Forms of both beauty and sameness (identity).

Yet matters are not quite so simple. We can begin by noting that in his discussion of forms of confusion in 'everyday language' in 3.323, Wittgenstein mentions the appearance of "identical" as an adjective'. Given that, according to 5.4733, 'we have given no meaning to "identical" as adjective', this must be a case of our having failed to give a meaning 'even though we believe we have done so'. But what could he be referring to here?

In my opinion, Wittgenstein has in mind a *philosophical* usage of the German word '*identisch*' ('identical') as meaning 'self-identical'—where this is taken to be a peculiarly important yet universal property.²³ Now, if

²³ Evidence of this usage can be found in, for example, the entry for 'Identität' in Rudolf Eisler's Wörterbuch der Philosophischen Begriffe (1904), which begins: 'Dieselbigkeit; Einerleiheit, Sich-selbst-gleichbleiben', and later adds 'Das Ich beurteilt etwas als "identisch" heißt: es supponiert einem Bewußteinsinhalt das gleiche Object, es verlegt damit seine eigene Identität in das Wahrgenommene. Die Identität der Objecte is ein Reflex, eine (empirische fundierte) Projection der (unmittelbar elrebten, nicht beschreibbaren) Identität des Ich' (482).

'identical' is a relational or two-place predicate, there should be no problem in defining such a usage of 'identical' as adjective:

x is (self-)identical = Def x is identical with x.

But of course, in the *Tractatus* Wittgenstein denies that 'identical' is an ordinary two-place relation sign.

At 5.4733, Wittgenstein says that 'when it ("identical") occurs as the sign of equality it symbolizes in an entirely different way'. I take this to mean that the sign of equality symbolizes in an entirely different way from the way in which the purported adjective 'identical' is supposed to symbolize. But I do not think the difference here is captured by saying that the one symbolizes in the way that two-place predicates do and the other symbolizes (or would symbolize if it did at all) in the way that one-place predicates do. For the way in which 'identical' symbolizes 'when it occurs as the sign of equality' is shown by Wittgenstein through its elimination—through the description of a notation in which the sign of equality is dispensed with, 'identity of the object' is expressed 'by identity of the sign' (5.53) and propositions in which the sign of identity is used are transformed into propositions in which no such sign occurs (5.53-5.5352). The 'sign of equality' is thus revealed as a device for keeping track of relations between bound variables, a device which can be dispensed with in favour of an 'exclusive' interpretation of distinct variables with overlapping scopes. Significantly for our purposes, given this convention 'we see that apparent propositions like: " $a = a', \dots (x) \cdot x = x$ ", ... etc. cannot be written in a correct logical notation at all. So all problems disappear which are connected with such pseudo-propositions' (5.534-5.535).

We are now in a position to diagnose more clearly the error involved in the puzzle about whether the Good is more or less identical (the Same) as the Beautiful. At least one source of this puzzle is the appearance that the word 'identical' functions as a relational predicate, from which we could then define an adjective (*Eigenschaftswort*, property-word) 'identical' (meaning 'self-identical'), as one can define the predicate 'suicide' from the relation 'kills'. The misleading grammatical appearance here is one in which 'two words, which signify in different ways, are apparently applied in the same way in the proposition'—seeing that the word 'identical' is applied grammatically in the same way as a relational word, we are led to believe that we can derive from it a one-place predicate, '(self)-identical'.

But we have in fact given no meaning to this word 'as an adjective', for the only meaning we have given to 'identical' as an (apparent) relational sign is one which gives no meaning to the definiens of the purported definition

x is (self-)identical = x is identical with x Def.²⁴

Now, let us return to the puzzle that led us to consider this peculiar example in detail. We seemed to have arrived at two competing accounts of the origins of philosophical nonsense: on the first account, nonsense arises from confusion and equivocation, while on the second account nonsense arises from a lack of meaning. These two seemed to be in conflict. Since equivocation and ambiguity require that a given sign have multiple meanings, according to the first account a sign would have a surfeit of meaning, not a lack of meaning. Our difficulty was to reconcile these opposing views.

Our analysis of the example from 4.003 can help us with this difficulty. For, in that analysis, both the idea of equivocation and the idea of a lack of meaning played a role. In accordance with 5.4733, we concluded that no meaning has been given to 'identical' as an adjective. But this is in spite of the fact that we might have thought we had done so. And the illusion that we had done so is fostered by the confusing form of our language, which leads us to treat 'identical', when functioning as the 'sign of equality', as if it were a relational predicate from which we could reflexively define a oneplace predicate, or adjective.

This is a complex case of the kind of interaction that can take place between the 'dangerous' forms of equivocation, the 'subtle yet not unimportant' variations, and failure to determine meaning. But simpler

But isn't the same (gleich) at least the same (gleich)?

Wittgenstein continues:

We seem to have an infallible paradigm of identity (Gleichheit) in the identity of a thing with itself. I feel like saying: 'Here at any rate there can't be a variety of interpretations. If you are seeing a thing you are seeing identity too.'

Then are two things the same when they are what one thing is? And how am I to apply what one thing shews me to the case of two things?

'A thing is identical (identisch) with itself.' There is no finer example of a useless proposition, which yet is connected with a certain play of the imagination. It is as if in imagination we put a thing into its own shape and saw that it fitted.

This discussion bears comparison to the example from 4.003, and I believe confirms my interpretation of that example. But there is not sufficient space to explore that here.

²⁴ In the Philosophical Investigations, Wittgenstein raises a question related to those posed by Parmenidean aporia about the Same and the Different (2001a: sections 215-16):

cases exist as well. For example, if I use a word with two meanings, and those meanings are not unrelated (so that the variation between them is 'subtle'), yet the two uses involve different logical functions (so that the variation is 'not unimportant'), I am liable to fall into a form of confusion where I am under the illusion that I am using the word with both meanings at the same time. In such a case I might slide imperceptibly between the two uses of the word (as Frege claims his predecessors moved smoothly from using 'unit' as a concept-word to using 'unit' as a proper name). But in such a case we should not say that I have used the word with one fixed meaning at all—in one sense I have used it with multiple meanings, but in another sense, it can be fairly said that I have failed to give a meaning to my word.

These reflections can shed light on Wittgenstein's account of 'the right method in philosophy' at 6.53. We should, he tells us, 'say nothing except what can be said...and then always, when someone else wished to say something metaphysical . . . demonstrate to him that he had given no meaning to certain signs in his propositions'. Now, one might wonder how one is to demonstrate to, say, F. H. Bradley, that 'he has given no meaning to certain signs in his propositions'. It will certainly not do to just pound the desk and proclaim his words to be meaningless, or to assert that we do not understand him. He will simply reply that we should try harder. But we now see our way to a technique for showing to another that his words lack meaning: we must show to him how the illusion that his words have a fixed meaning is fostered in him by confusions arising from 'subtle yet not unimportant variations' in our language.

V. 'Russell's merit': puzzles in 'On Denoting'

We have now taken a very long detour through Hertz, Frege, and the Tractatus, with an eye to understanding Wittgenstein's conception of philosophical nonsense. The purpose of this detour was ultimately to help us resolve a textual puzzle: What did Wittgenstein mean when he asserted at 4.0031 that 'Russell's merit is to have shown that the apparent logical form of the proposition need not be its real form'? Recall that we established three criteria for our answer to this question: (a) we need to isolate a particular merit due to Russell, rather than any of his predecessors; (b) the

link to the discussion of philosophical nonsense in 4.003 must be made clear; and (c) we must show how Russell contributes to the project of the 'Critique of language' (which constitutes 'all philosophy'), in both its clarificatory and its negative (or therapeutic) aspects. I now propose to make good on these demands.

I want to begin by pointing out a crucial feature of the argument Russell develops for his theory of descriptions in 'On Denoting': the theory is to be accepted because of its power in solving logical puzzles. Russell writes (1905: 484–5):

A logical theory may be tested by its capacity for dealing with puzzles, and it is a wholesome plan, in thinking about logic, to stock the mind with as many puzzles as possible, since they serve much the same purpose as is served by experiments in physical science. I shall therefore state three puzzles which a theory as to denoting ought to be able to solve; and I shall show that my theory solves them.

In a letter written just after he completed work on 'On Denoting', Russell wrote to Lucy Donnelly that 'it is a great thing to find a puzzle; because so long as it is puzzling, one knows one has not got to the bottom of things' (1998: 183). In 'On Denoting', Russell develops three puzzles, concerning the substitutivity of identicals, the law of the excluded middle, and denial of existence. He appeals to features of his logical notation to dissolve the puzzles. Moreover, his solution of at least the first two of the puzzles turns on the recognition that the victim of puzzlement is involved in a kind of equivocation which is laid bare through a proper exhibition of logical form. In my opinion, this fact is the key to 'Russell's merit'. Where Hertz recognized the source of philosophical confusion in the misleading and equivocal nature of language, and Frege added the idea of constructing a *Begriffsschrift* in which such equivocation is not possible, it was Russell who fully developed the technique of employing such a *Begriffsschrift* as a tool for unmasking philosophical nonsense.

The case of the second puzzle is clearest, so I will focus on it here²⁵ (1905: 485):

By the law of excluded middle, either 'A is B' or 'A is not B' must be true. Hence either 'the present King of France is bald' or 'the present king of France is not bald'

²⁵ Concerning the other two puzzles, see section VI below.

must be true. Yet if we enumerated the things that are bald, and then the things that are not bald, we should not find the present King of France in either list. Hegelians, who love a synthesis, will probably conclude that he wears a wig.

The puzzle turns on taking the proposition 'the present King of France is bald' as having the form

Bk

and taking 'the present King of France is not bald' as its negation

 $\sim Bk$.

Given these assumptions, it seems we must have either Bk or $\sim Bk$ true. Yet at the same time, the truth of Bk would seem to require that among the bald things, we find the present king of France; as this is not the case we are led to conclude that $\sim Bk$; but this equally seems to require that among the non-bald things we find the present king of France; as this is also not the case we are led back to the original hypothesis that Bk. We seem then, to be caught in a contradiction.

Russell's solution to the puzzle of course involves his denial that 'the present king of France' has the logical form of a subject–predicate sentence *Bk*. But this is not the whole of his solution. Rather, he diagnoses the puzzle as turning on a subtle form of equivocation, an ambiguity which he says 'is hard to avoid in language'. This is the ambiguity between 'primary' and 'secondary' occurrences of a definite description, or between wide and narrow scope readings of the description. Russell informs us that while this ambiguity 'does no harm if we are on our guard against it', 'in symbolic logic it is of course easily avoided' (1905: 489).²⁶

The distinction arises whenever a denoting phrase such as a definite description occurs in combination with a sentential operator, such as negation. So, the distinction can be illustrated using simpler denoting phrases than definite descriptions. Consider for example the sentence

Everything that glitters is not gold.

containing the denoting phrase 'everything that glitters'. This can be understood to mean either

²⁶ Russell later wrote that 'confusion of primary and secondary occurrences is a ready source of fallacies where descriptions are concerned' (1920: 179).

Every glittering object is non-gold. (in 'symbolic logic': $(x)(Lx \supset \sim Gx)$)

or

It is not the case that everything that glitters is gold. (in 'symbolic logic': \sim (x)($Lx \supset Gx$)).

In the first case the denoting phrase has a primary occurrence (or wide scope) whereas in the latter the denoting phrase has a secondary occurrence (or narrow scope). Clearly these two readings of the original sentence are not equivalent. If some glittering objects are gold and others are not, then the first will be false, and the second true.

Russell develops the distinction between primary and secondary occurrences in connection with the first of his three puzzles, and then employs it in the solution of the second puzzle as well (1905: 490):

The distinction of primary and secondary occurrences...enables us to deal with the question whether the present King of France is bald or not bald . . . 'the King of France is not bald' is false if the occurrence of 'the King of France' is primary, and true if it is secondary. Thus all propositions in which 'the King of France' has a primary occurrence are false; the denials of such propositions are true, but in them 'the King of France' has a secondary occurrence. Thus we escape the conclusion that the King of France has a wig.

If we present the argument of the puzzle and the proposed solution in English, we might get something like the following:

- (A) Either the King of France is bald or the King of France is not bald. True (Law of Excluded Middle).
 - Therefore, either (B) or (C) is true:
- (B) The King of France is bald
- (C) The King of France is not bald.

But among the bald there is no king of France. So (B) is false. And among the non-bald there is no king of France either. So (C) is false.

Either way, a falsehood is true. Contradiction.

The solution then turns on distinguishing two readings of (C):

- (C) is ambiguous between:
 - (C1) The King of France is (not bald). (primary occurrence)
 - (C2) It is not the case that (the King of France is bald). (secondary occurrence)

Under reading (C1), (C) is false, but is not the negation of (B), so we have no violation of the Law of Excluded Middle; under reading (C2), (C) is the negation of (B), and so is true, but this does not require that there be a king of France among the non-bald.

According to this solution, the puzzle arises because of an equivocation of a particularly important and subtle kind. For there is no single word in the sentence 'the present king of France is not bald' which is equivocal in a way that is responsible for the ambiguity of the entire sentence. Rather, the sentence as a whole has a grammatical structure that is ambiguous in that it allows two distinct and conflicting logical forms. This is clearest if we analyse the solution to the puzzle 'in symbolic logic'. The distinction between (C1) and (C2) is now represented as the distinction between their symbolic representations, (C1') and (C2'):

$$(C1')(\exists x)((y)(Ky \equiv x = y) \bullet \sim Bx)$$

$$(C2')\sim (\exists x)((y)(Ky\equiv x=y)\bullet Bx)$$

Both of these build on the fundamental analysis of (B) as

$$(B')(\exists x)((y)(Ky \equiv x = y) \bullet Bx)$$

Given this analysis, the purported instance of the Law of the Excluded middle, (A), is itself ambiguous between:

(A1)
$$(\exists x)(y)((Ky \equiv x = y) \bullet Bx) \lor (\exists x)((y)(Ky \equiv x = y) \bullet \sim Bx)$$

and

(A2)
$$(\exists x)(y)((Ky \equiv x = y) \bullet Bx) \lor \sim (\exists x)((y)(Ky \equiv x = y) \bullet Bx)$$

(A1) is visibly *not* an instance of the Law of the Excluded Middle. It implies the existence of a King of France, and is therefore false. (A2), in contrast, *is* an instance of the Law of the Excluded Middle, and so is true, but does not imply existence of King of France.

Now the original sentence (C) permits two readings, represented in 'symbolic logic' as (C1') and (C2'). And similarly, the purported instance of the Law of the Excluded Middle, (A), permits two readings, (A1) and (A2). But in neither (C) nor (A) is there a particular word that is responsible for the equivocation. It is rather in the interaction between the words that

an ambiguous structure results, and the virtue of the symbolic representation is that it separates out the two readings so as to make clear in each case the way in which the denoting phrase 'the present king of France' and the logical operator of negation are related.

From Wittgenstein's point of view, what Russell has pointed out is that in both (A) and (C) we have cases in which the same (propositional) sign belongs to two different symbols (different propositions). When properly analysed, the two readings of (C) (and so of (A)) have different logical form. Russell suggests, in introducing the puzzle, that 'Hegelians, who love a synthesis, will probably conclude that he [the King of France] wears a wig.' This conclusion is dispelled by logical analysis, which reveals the equivocation on which it turns. A philosopher (a Hegelian?) who wants to hold onto such a problem, to worry it and to allow it to worry him, must be intending (A), incoherently, as both (A1) and (A2), slipping between the two meanings at different stages of his argument, thereby failing to mean anything determinate by his words. Thus, (A), when seen as philosophically puzzling, is in fact not false, but nonsensical—it has no fixed sense.

Thus we have here a model of Wittgenstein's account of philosophical problems as nonsense arising from the 'misunderstanding of the logic of our language'. And in unmasking this nonsense, 'symbolic logic' plays a leading role. In this way, Russell fulfills Frege's promise, that the Begriffsschrift can become 'a useful tool for philosophers', through 'uncovering illusions which through the use of language often almost unavoidably arise concerning the relations of concepts' (Frege 1972: 106). Of course, Russell's solution is not addressed to a genuine philosophical problem, but to a 'logical puzzle' designed to test a theory. But in offering this solution, Russell has uncovered a possibility for the use of 'symbolic logic' in philosophical therapy, in the curing of philosophical confusion. It is this that I believe Wittgenstein referred to when he spoke of 'Russell's merit'.

Russell's merit, Wittgenstein tells us, is to have 'shown that the apparent logical form of the proposition need not be its real form'. I would add to that: 'even when the apparent logical form does not correspond to any real form'—because we unwittingly confuse distinct logical forms with one another. It is in such a case that 'Russell's merit' can be to contribute to the philosophical resolution of philosophical puzzlement, by unmasking the

confusions and equivocations that lie at the root of such puzzlement. This reading of 'Russell's merit' succeeds where the obvious interpretation fails.

- (a) Russell's particular merit was to show that forms of equivocation exist which can only be clearly unmasked and avoided through the application of something like a *Begriffsschrift*. This depends on the more general point that a *Begriffsschrift* can help to make perspicuous the underlying logical structure of a proposition, but goes beyond it significantly, especially in revealing forms of equivocation that occur in propositions taken as wholes but cannot be reduced to equivocation on any particular word occurring within the proposition. Whereas the latter form of equivocation might be addressed simply by introducing a new word, the form of equivocation identified by Russell seems to require a new symbolism to lay it bare.
- (b) Russell's merit, so understood is directly tied to the discussion of philosophical nonsense in 4.003 through our analysis of the relationship between Wittgenstein's conception of philosophical nonsense and forms of confusion and equivocation. Thus 4.0031 finds its proper place as a comment on 4.003, not just 4.002.
- (c) Finally, Russell contributes decisively to the project of a 'Critique of language' by showing how the Fregean tool of the *Begriffsschrift* can have an indispensable role in the unmasking of philosophical illusion.

I believe that this moral is displayed in many of Wittgenstein's attempts at solutions of the problems of philosophy in the *Tractatus*, and that it guides his own remarks about devising 'conceptual notations' in that work. While showing this in general is a larger project than can be accomplished in this chapter, in the next (and final) section, we will see something of this sort in the case of Wittgenstein's treatment of identity.

VI. The other puzzles, and Wittgenstein's critique of Russell

The above interpretation of 'Russell's merit' turned especially on the second of Russell's three puzzles in 'On Denoting'. I will conclude with a discussion of the other two puzzles from 'On Denoting'. While acknowledging their similarities to the second puzzle, discussed above, I will argue

that these other puzzles are nonetheless less appropriate as models for Wittgenstein's understanding of Russell's merit. I will first show how one might try to see the solution to each of these puzzles as turning on a similar confusion of logical forms, unmasked by the distinction between primary and secondary occurrences. I will argue that this idea cannot provide a stable solution to these puzzles (in contrast to the case of the second puzzle). I will then discuss the different attitudes of Russell and Wittgenstein to the remaining difficulties. For Russell, these difficulties lead to his acquaintance-based epistemology and semantics, and his doctrine that most apparent proper names are really descriptions in disguise. For Wittgenstein, Russell's solutions to these puzzles involve a further confusion, between formal and real concepts, internal and real relations—especially in the case of identity and existence—and this accounts for the further difficulties in which Russell eventually finds himself entangled. Wittgenstein's technique in criticizing Russell on identity is modelled on Russell's own use of 'symbolic logic' to solve logical puzzles involving denoting phrases. Just as Russell shows denoting phrases to be incomplete symbols by introducing a logical notation in which they are 'paraphrased away', so Wittgenstein introduces a logical notation in which the sign for identity is paraphrased away, each sentence in which it occurs being translated into another sentence in which it does not occur. So there is an important sense in which Wittgenstein criticizes Russell by turning his own philosophical techniques against him.

The first puzzle concerns the apparently valid inference:

- (1) George IV wished to know whether Scott was the author of Waverley.
- (2) Scott was (=) the author of Waverley.

Therefore

(3) George IV wished to know whether Scott was Scott.

While this appears to be an application of the principle of the substitutability of identicals, it also seems that one should say that (1) and (2) are true and (3) is false—'an interest in the law of identity can hardly be attributed to the first gentleman of Europe'27 (1905: 485).

²⁷ In the unpublished manuscript 'On Fundamentals', Russell initially formulated the puzzle with (1) as 'people were surprised that Scott was the author of Waverley' and (3) as 'people were surprised

It might seem adequate to solve the puzzle to point out that (2), when analysed as

$$(2')(\exists x)((y)(Ay \equiv x = y) \bullet s = x)$$

does not have the form of an identity sentence, so that there is no question of an application of the substitutability of identicals here. This would be hasty, however. For if we apply the theory of descriptions to (1) as well, we apparently get something like:

$$(1')(\exists x)((y)(Ay \equiv x = y) \bullet W(s = x)),$$

with 'W...' representing 'George IV wished to know whether...' And, Russell tells us, the inference from (1') and (2') to (3) is valid—since in general 'the truth of the inferences resulting from making what is verbally the substitution of "Scott" for "the author of Waverley"...' is unaffected, 'so long as "the author of Waverley" has what I call a primary occurrence in the proposition considered' (1905: 489). It is in response to this problem that Russell first introduces the distinction between primary and secondary occurrences of denoting phrases. This distinction permits two readings of (1). The primary occurrence reading is (1'), while the secondary occurrence reading is:

$$(1'')W((\exists x)((\gamma)(A\gamma \equiv x = \gamma) \bullet s = x))$$

Russell maintains that it is (I'') that we usually would intend by (I), and that (3) (or (3'), 'W(s = s)') does not follow from (1") and (2'). Thus the unfortunate inference is apparently avoided.

that Scott was Scott' (Foundations of Logic, 1994: 370). It helps to appreciate the humour in Russell's puzzle to recall some background that would have been well known to Russell's readers. Scott published the Waverley novels anonymously. The first novel, entitled Waverley, appeared in 1814. Subsequent novels in the series claimed to be written by 'the author of Waverley'. Scott did not reveal his authorship of the Waverley novels until 1827. In a famous incident, George IV tried to force Scott to reveal his authorship of the Waverley novels by making a toast to 'the author of Waverley' in Scott's presence. (See the editor's discussion (1994: 650-1).) George IV was commonly known as 'the first gentleman of Europe' because of his reputation as a vain and empty-headed dandy. Russell clearly did not think it impossible in general for someone to take an interest in the law of identity; rather, he saw this as impossible for so intellectually vacuous a man as George IV. In a letter of 13 June 1905, he wrote that for George IV to wonder whether Scott was Scott would imply 'more interest in the Laws of Thought than was possible for the First Gentleman of Europe' (1998: 183).

The third puzzle in 'On Denoting' concerns denial of existence.²⁸ The sentence (4) is apparently true:

(4) The round square does not exist.

Yet (4) seems to have the form of the negation of a simple subject–predicate sentence:

$$(4')\sim Er$$

It is difficult to see how this can be true unless the subject of the sentence exists in some sense. As Russell puts it, 'How can a non-entity be the subject of a proposition?... Hence, it would appear, it must always be self-contradictory to deny the being of anything...' (1905: 485).

Russell's solution to this puzzle in 'On Denoting' is not entirely clear. After solving the second puzzle (concerning the present king of France's baldness), he asserts that 'we can now see how to deny that there is such an object as' the round square.²⁹ He tells us that 'the whole realm of non-entities... can now be satisfactorily dealt with', and that phrases that appear to denote such non-entities are 'denoting phrases that do not denote anything'. He reiterates the primary/secondary occurrence distinction, concluding that for any empty denoting phrase, 'if [it] has a primary occurrence, the proposition containing the occurrence is false; but if the occurrence is secondary, the proposition may be true' (1905: 490–1).³⁰

In 'On Denoting', however, Russell does *not* tell us explicitly how to deny that there is such an object as the round square. His reference to the primary/secondary occurrence distinction, however, suggests that he is intending to apply the apparatus of his theory of descriptions to (4) and its ilk. Here (4) might be conceived of as the application of the predicate

²⁸ In fact, the example that Russell uses to introduce the puzzle, 'the difference between A and B' when 'it is false that A and B differ', raises a number of other thorny issues, having to do with the problem of false judgement. The issues here are too complex for detailed discussion in this chapter. See Hochberg, 'Descriptions, Situations and Russell's Extensional Analysis of Intentionality' (1989) for some discussion of the relationship of this puzzle to these broader issues.

²⁹ He uses his example of the difference between A and B, which I am avoiding for the reasons mentioned in footnote 28 above.

³⁰ Similarly, in *Principia Mathematica*, the first example given to illustrate the thesis that 'when $(\iota x)(\varphi x)$ has a secondary occurrence, a proposition in which it occurs may be true even when $(\iota x)(\varphi x)$ does not exist' is the proposition 'There is no such person as the King of France' (Whitehead and Russell 1976: 69).

'exists' to the denoting phrase 'the round square'. Since (4) also contains negation, we would have two readings:

$$(4'')(\exists x)((y)((Ry \bullet Sy) \equiv x = y) \bullet \sim Ex)$$
$$(4''') \sim ((\exists x)((y)((Ry \bullet Sy) \equiv x = y) \bullet Ex))$$

(4"), the primary occurrence reading, would be false, because there is no non-existent round square; but (4""), the secondary occurrence reading, would be true, because there is no existent round square.31

However, in later writings, Russell provided a special definition of existence as applied to definite descriptions, according to which 'the F exists' is to be analysed as ' $(\exists x)(y)(Fy \equiv x = y)$ '. This does not yield any general definition of 'exists' as a predicate, which could be applied to terms that are not descriptions. However, a few logical moves lead to the suggestion that 'x exists' can, after all be defined as a predicate. First, note the equivalence of

$$(\exists x)(y)(Fy \equiv x = y)$$

and

$$(\exists x)((y)(Fy \equiv x = y) \bullet (\exists z)(x = z))$$

Next, observe that while the first is the official Russellian analysis of 'the F exists', the second is the Russellian analysis (with primary occurrence of the description) of ' $(\exists z)$ (the F = z)'. We might then conclude that we can treat 'x exists' as the predicate ' $(\exists z)(x = z)$ '. This yields as our two readings of (4):

$$(4'''')(\exists x)((y)((Ry \bullet Sy) \equiv x = y) \bullet \sim (\exists z)(x = z))$$
$$(4''''')\sim((\exists x)((y)((Ry \bullet Sy) \equiv x = y) \bullet (\exists z)(x = z)))$$

Can we then assert that the first and third puzzles, like the second, arise from an equivocation, that each puzzle involves a confusion between primary and

³¹ This approach to the solution of the puzzle is taken by, for example, Lycan, *Philosophy of Language* (2000: 18-19). Perhaps because of its inclusion in this book, the same idea can be found reproduced in several sets of class handouts and lecture notes accessible on the internet.

³² Again, see Lycan, *Philosophy of Language* (2000:19), for one example among many. Also, see *Principia* Mathematica (Whitehead and Russell 1976: 69), where 'There is no such person as the King of France' is paraphrased, apparently interchangeably, as both ' ${\{E! (\iota x)(\varphi x)\}}$ ' and ' ${\{\exists c\}.c} = (\iota x)(\varphi x)\}$ '.

secondary occurrence readings (of (I) and (4) respectively), by analogy with our reading of the second puzzle? That is, can we say that anyone who is puzzled by George IV's epistemic state is suffering from an illusion of having given a determinate sense to (I), while actually wavering between (I') and (I''), and similarly, that anyone who is puzzled by the round square's non-existence is wavering between (4''''') and (4''''''), and so not giving any determinate sense to (4)?

In each case, there are difficulties in the way of embracing this move. In the case of the first puzzle, the problem is that the proposed solution accepts Russell's claim that the inference from (1') and and (2') to (3) is valid. Russell further claims that (1') can itself be true, in a case such as the following: George IV sees a man from a distance, who is in fact the author of Waverley, Sir Walter Scott; and asks himself, 'is that Scott?' (1905: 489). In such a case, then, Russell is committed to the claim that we *can* validly infer that George IV also wishes to know whether *Scott* is Scott. But this may seem as objectionable as the inference that gave rise to the puzzle in the first place. For even in this case it would seem that 'an interest in the law of identity can hardly be attributed to the first gentleman of Europe'.³³

In the case of the third puzzle, the difficulty is that in treating 'exists' as a general predicate, the proposed solution flies in the face of Russell's explicit statement in *Principia Mathematica* that 'our definition give[s] no meaning to E!x' for variable x. That is, he has only defined the entire *context* 'the F exists', with a description as subject. He has not defined an existence predicate (175). Indeed, in *Principia*, Russell implies that in the case of a 'proper name...a name directly representing some object', a sentence denying existence of that name is not false but *meaningless*, 34 whereas in

³³ This point is made by Scott Soames (*The Dawn of Analysis*, 2003: 123) and Saul Kripke ('Russell's Notion of Scope' (2005: 1,024). Kripke remarks that the point had been ignored prior to Soames's discussion. But it is arguably present in Linsky, 'Description and the Antinomy of the Name-Relation' (1952: 274).

An anonymous referee suggested that 'the obvious Russellian way to block' this particular problem would be to take 'Scott' to be a 'disguised description'. I do not explore this suggestion further because, as the referee notes, 'the point remains'—this move seems to simply shift the problem to the level of 'logically proper names', which cannot be taken as disguised descriptions. I discuss how Russell would avoid this problem for such names below.

³⁴ 'Whenever the grammatical subject of a proposition can be supposed not to exist without rendering the proposition meaningless, it is plain that the grammatical subject is not a proper name...' (Whitehead and Russell 1976: 66).

the logic of *Principia Mathematica*, ' \sim ($\exists z$)(a = z)' is false, indeed *logically* false, when a is a proper name.

Russell's eventual response to these difficulties, in the period when Wittgenstein worked closely with him, would involve many of the key elements of his later philosophical system. Both his acquaintance-based semantics and epistemology and his metaphysics of ordinary things and persons as logical constructions out of sense-data (the objects of acquaintance) would play a role. Since Russell maintains that the notion of existence defined for the case of descriptions cannot be extended to a general existence-predicate, he would have to dismiss the supposed primary occurrence reading (4") of (4) as a mere illusion. This position seems unstable, however, since ' $(\exists z)(x = z)$ ' apparently provides a perfectly defensible definition of an existence predicate, which can apply to both descriptions and true proper names, even if it yields only logical truths in the latter case. And indeed, it is not hard to find Russell saying things like 'If I am acquainted with a thing which exists, my acquaintance gives me the knowledge that it exists' (1912: 45). Yet according to the official doctrine of Principia, 'it would seem that the word "existence" cannot be applied to subjects immediately given'—though in this instance Russell is somewhat cagey in stating his position (Whitehead and Russell 1976: 175).

Russell's response to the difficulties raised by the solution to the first puzzle would involve not only his semantics and epistemology, but also his metaphysics of logical constructions out of the primary elements, sensedata. First, Russell maintains that for objects of acquaintance, statements of identity are tautologous when true. To grasp the meanings of two names of the same object of acquaintance is *ipso facto* to know that an identity proposition relating them is true. This means that in a case involving two logically proper names there can be no question of 'wishing to know' about identity. To understand the identity claim is to know whether it is true. But this does not fully resolve the problem as initially stated, because there would still be the possibility of wishing to know *de re* about what is in fact a case of self-identity, when the object concerned is known only by description. It is here that the treatment of objects other than sense-data as logical constructions out of sense-data comes into play. Apparent identity

³⁵ See Soames for some discussion of this in the case of the first puzzle (2003: 123ff).

predications involving objects other than sense-data are to be reduced to various claims about sense-data and their properties and relations (for example, an identity claim concerning classes of sense-data would be reduced to the claim, concerning two different properties of sense-data, that those properties applied to exactly the same sense-data).

From Wittgenstein's point of view, however, all such manoeuvring is largely beside the point, at least as far as these puzzles are concerned—for the difficulties generated here really stem from Russell's treatment of identity as a real relation. This is, for Wittgenstein, an instance of one of the most basic forms of confusion, 'the confusion between formal concepts and proper concepts which runs through the whole of the old logic' (4.126) or again 'the confusion, very widespread among philosophers, between internal relations and proper (external) relations' (4.122). Identity is such an internal relation. Just as 'the existence of an internal relation between possible states of affairs expresses itself in language by an internal relation between the propositions presenting them' (4.125) so 'identity of the object' can be expressed 'by identity of the sign and not by means of a sign of identity' (5.53). Russell's notation has the defect of using an identity sign which behaves syntactically like any other relation sign. It is because of features like this that Wittgenstein writes that 'the logical symbolism (Begriffsschrift) of Frege and Russell', in spite of being 'a symbolism . . . which obeys the rules of logical grammar—of logical syntax', 'does still not exclude all errors'36 (3.325).

Wittgenstein's response to this problem is to suggest a revision of the logical symbolism of Frege and Russell, one in which the identity sign is dispensed with in favour of an exclusive reading of variables when one variable is within the scope of the other. Wittgenstein shows how sentences in the symbolism of *Principia Mathematica* can be paraphrased in this new logical notation, by presenting a number of examples (but without providing the kind of systematic contextual definition given in the theory of descriptions). A consistent application of what Wittgenstein takes to be the lessons of this substitution of one *Begriffsschrift* for another, however, will show that the solutions suggested above to the first and third puzzles

³⁶ Thus here even the *Begriffsschriften* of Frege and Russell reproduce the misleading grammar of identity as a relation which we discussed in ordinary language above.

themselves involve serious confusions.³⁷ Let us take the puzzles in reverse order, beginning with the third.

First we note that Russell's definition of 'the F exists' as ' $(\exists x)(y)(Fy \equiv$ x = y)' can be rewritten in Wittgenstein's new notation as ' $(\exists x)Fx \bullet \sim (\exists x)$ $(\exists y)(Fx \bullet Fy)$ '. So here the use of the identity sign is eliminable—and so, innocent. The same holds true, therefore, in the equivalent but more complicated sentence ' $(\exists x)((y)(Fy \equiv x = y) \bullet (\exists z)(x = z))$ '. This sentence is perfectly alright as it stands. The only difficulty with it is that it makes it appear as if ' $(\exists z)(x = z)$ ' is a real predicate, expressing a property of x. But only replace 'x' with a name, to yield ' $(\exists z)(a = z)$ ', and you obtain what Wittgenstein considers to be a merely 'apparent proposition' which 'cannot be written in a correct logical notation at all' (5.534).38 Hence we have no ground to view Russell's analysis of 'the F exists' as vindicating an existence predicate which could then be appealed to in constructing a 'primary occurrence' reading of 'the F does not exist'.

If we then turn to the various formulas involved in the discussion of the first puzzle, we again find a number of uses of the identity sign, some of which can be innocently eliminated, whereas others are ineliminable. This ineliminability is, from Wittgenstein's point of view, a symptom of a deeper disease: we have here instances of a fundamental confusion. To use such seeming propositions is to confuse the real logical function of the identity sign as a device for cross-referencing variables, and its apparent grammatical function as a relation sign. Or, perhaps better, it is to confuse the logical function of the identity sign with the logical function of other symbols which work in grammatically the same way according to the rules of the notation of Principia.

Thus, it is easy to rewrite 'Scott is the author of Waverley', symbolized as

³⁷ In 'Inheriting from Frege' (2010), Cora Diamond argues that many of Wittgenstein's criticisms of Frege rely on deeply Fregean modes of philosophical diagnosis and treatment. The present point concerning Wittgenstein's criticisms of Russell runs parallel to hers.

Wittgenstein lists ' $(\exists x)x = a$ ' as one of these pseudo-propositions, along with 'a = a' and other examples. In ' $(\exists x)x = a$ ' it is not possible to see '=' as a device for managing variable (or even name) cross-referencing. This is in contrast with ' $(\exists x)(x = a \bullet Fx)$ ' which is perfectly in order, and can be rewritten simply as 'Fa'. Note that careful consideration of this and similar examples should reveal that, from Wittgenstein's point of view, signs like '•' and '⊃' are also functioning equivocally in contexts involving the identity sign. These signs cannot be taken as genuine truth-functional operations in such contexts without taking identity as a proper relation.

$$(2')(\exists x)((y)(Ay \equiv x = y) \bullet s = x)$$

in Wittgenstein's new notation as

$$(2'^*)As \bullet \sim (\exists x)(\exists y)(Ax \bullet Ay).$$

Similarly we can rewrite the 'secondary occurrence' interpretation of (1),

$$(1'') \mathbf{W}((\exists x)((y)(Ay \equiv x = y) \bullet s = x))$$

as

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$$(1''^*)$$
 $W(As \bullet \sim (\exists x)(\exists y)(Ax \bullet Ay)).^{39}$

On the other hand, the crucial 'primary occurrence reading' of (1)

$$(1')(\exists x)((y)(Ay \equiv x = y) \bullet W(s = x))$$

contains an ineliminable use of the identity sign in the de re context " W(s = x)". To see this as a legitimate propositional constituent, one has to see 's = x' as expressing a property of x, the property of Scott's being identical with x. And this is to confuse an internal relation (identity) with a real relation, a formal concept (that of 'being Scott') with a real concept. Only in this way can one see 's = x' as expressing something that could be the object of George IV's desire for knowledge. The same confusion, of course, shows up again in the putative troubling conclusion (3), 'W(s = s)'. And again, this confusion is made possible by the fact that in the notation of Principia Mathematica, we have a case of one of those most subtle forms of equivocation in which 'two words, which signify in different ways, are apparently applied in the same way in the proposition' (3.323). In this way, the possibility of confusion that Wittgenstein originally discerned in 'the language of everyday life' (3.323) is reproduced in the 'logical symbolism of Frege and Russell', which, while designed to avoid such problems 'does not exclude all errors' (3.325). But an approach to these difficulties was nonetheless indicated in their work, and especially in Russell's way of tackling puzzles in 'On Denoting'. If in fact he had not quite 'got to the bottom of things' there, nonetheless, from the point of view of the author of the Tractatus, he had made an essential contribution to exhibiting the way to get there.

³⁹ There are further issues concerning Wittgenstein's view of propositional attitude operators like 'W', especially in the light of 5.541–5.5422. However, there is not time to explore them here.

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Naturalism and 'Turning our Examination Round'

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I. At the beginning of what is sometimes called 'the chapter on philosophy' in the *Philosophical Investigations (PI)*, Wittgenstein remarks:

These considerations bring us to the problem: In what sense is logic something sublime? (PI 89)

He has earlier spoken of our 'tendency to sublime the logic of our language' (*PI* 38). It is clear that he believes that this tendency is one that he himself succumbed to in the *Tractatus*, and that the discussion which begins at *PI* 89 sets out both to characterize this tendency in detail and to point to how we might liberate ourselves from its grip.

At PI 108, he writes:

The *preconceived idea* of crystalline purity can only be removed by turning our whole examination round.

This makes clear that throwing off 'the *preconceived idea* of [the] crystalline purity [of logic]'—which is connected with the idea of 'subliming' the logic of our language—represents a decisive shift in Wittgenstein's philosophical development. The suggestion is that liberating ourselves from the grip of this idea involves 'turning our whole examination round'. Insofar as he sees his own early work as governed by this idea of logic, there is an implication that Wittgenstein now believes that the direction of his investigation should be the exact opposite from the one he had previously taken. The questions I want to consider in this chapter are: How are these ideas to be understood?

What is it to 'sublime the logic of our language'? What is involved in 'turning our whole examination round'?

2. When Wittgenstein first introduces the idea of 'subliming' in the *Investigations*, he connects it, not with his own early work, but with Russell's claim that the word 'this' is 'the only *genuine* name'. He describes the idea that 'this' is the only genuine name as a 'queer conception' which 'springs from a tendency to sublime the logic of our language' (*PI* 38). And we can perhaps get some hint of what he thinks is involved in 'turning the examination round' when he responds to this 'queer conception' as follows:

The proper answer to it is: we call very different things 'names'; the word 'name' is used to characterize many different kinds of use of a word, related to one another in many different ways...(PI 38)

If we focus on this aspect of Wittgenstein's response, then we might take it that 'subliming' is equivalent to overgeneralizing, or to taking one paradigmatic case as a model for all cases. This might be taken to suggest that the idea of 'turning the examination round' is to be understood as directing us away from a concern with the idea of a common essence, and towards the diversity of linguistic phenomena. This reading is central to Oskari Kuusela's interpretation of Wittgenstein's understanding of the relation between the early and later philosophy, as it is characterized in PI 108. Thus, according to Kuusela, '[t]he assumption of a common essence is...the basis of what Wittgenstein calls "the sublimation of logic" (Kuusela 2008: 110). On this interpretation, the point of PI 38 might be expressed by saying that in holding that 'this' is the only genuine name, Russell has dogmatically assumed that a feature of his model—an indexical expression referring to something immediately given—is a necessary condition of anything's being a name. Wittgenstein's counter to Russell—the de-sublimating move that is described as 'turning our whole examination round'—is to recognize Russell's model for what it is: an idealized model which can be used as 'an object of comparison', but which does not capture the essence of naming. This frees us up to recognize that names form a 'family' of expressions 'more or less related to one another'.

I do not want to deny that there is something correct in the suggestion that the assumption of a common essence is an important element in our tendency to sublime the logic of our language, and that at least part of what is involved in turning the examination round is abandoning the idea that the objects falling under a certain concept—say, the concept name or proposition—share an essence which it is the task of philosophy to make clear. However, it is clear that this idea does not, on its own, fully capture Wittgenstein's sense of what is 'queer' in Russell's conception of a genuine name, for the sentence from *PI* 38 quoted above continues:

... but the kind of use 'this' has is not among them.

It is not, therefore, that Russell has focused on a paradigm case and taken what are merely features of the paradigm for the essence of names. Rather, his 'queer' conception of naming, which springs from a tendency to sublime the logic of our language, has led him to take as a paradigm of a name something which, according to Wittgenstein, is not a name at all. Wittgenstein acknowledges that the word 'this' often occupies the same position in a sentence as a name. However, he does not think that this is enough to show that the word 'this' symbolizes in the way that a name does. The word 'this' is connected with names, in that names are characteristically defined by means of the demonstrative expression—'This is N', or 'This is called "N"'—but we do not use the word 'this' in the way that we use a name: we do not, for example, also give the definition 'This is called "this"' (PI §38).

However, even if we accept that there are aspects of the use of the word 'this' which might prompt someone to regard it as a name, this still would not completely explain why Russell should take it to be the only genuine name. The question is why should Russell take something which, according to Wittgenstein, we would not ordinarily, outside of philosophy, even think of as a name to be the only genuine name? Wittgenstein's suggestion is that the source of Russell's view is 'a tendency to sublime the logic of our language'. And he now goes on to connect this tendency with 'the conception of naming as, so to speak, an occult process', 'as a queer connexion of a word with an object', or with our thinking 'naming to be some remarkable act of mind, as it were a baptism of an object' (PI 38). No doubt there is a link between this idea and the idea of an essence of naming, but the tendency to sublime the relation between a name and the thing named goes beyond the dogmatism implicit in claiming that features of our model must hold for all cases. It is the tendency to think of naming as a peculiar kind of mental pointing, or directing of the mind onto an object, in virtue of which I make one thing rather than another the object of my thought.

3. Wittgenstein sees the same process of 'subliming' at work in the following thought:

'Thought must be something unique'. When we say, and *mean*, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: *this-is-so*. (PI 95)

It seems clear that he thinks something similar is going on here as in the case of Russell's thinking that 'this' is the only genuine name. Meaning, like naming, becomes a remarkable act of mind, something occult, hidden in the medium of the understanding. A thought is not a matter of signs coming before the mind, but of my *thinking* something, representing something to myself: I think 'this-is-so'.

Wittgenstein connects this picture of thought as a remarkable act of mind with a certain conception of logic, which he describes in PI 97:

Thought is surrounded by a halo.—Its essence, logic, presents an order, in fact the a priori order of the world: that is, the order of *possibilities*, which must be common to both world and thought. But this order, it seems, must be *utterly simple*. It is *prior* to all experience, must run through all experience; no empirical cloudiness or uncertainty can be allowed to affect it—It must rather be of purest crystal.

He then goes on to link this conception of logic as the condition or essence of thought with our being 'under the illusion that what is peculiar, profound, essential, in our investigation, resides in its trying to grasp the incomparable essence of language' (PI 97). Again, there is, as Kuusela points out, the suggestion of a connection between the idea of subliming and looking for a common essence. So, just as Russell assumes that naming has an essence which consists in a 'queer' connection between a word and an object, Wittgenstein makes a connection between our tendency to 'sublime' thought and the idea that there is an essence of representation logic—which is common to all thoughts that can be compared with reality for truth or falsity. However, there is also the suggestion that the idea of logic as the essence of all representation as such goes along with the idea 'that something extraordinary, something unique, must be achieved by propositions', 'as if a proposition did something queer' (PI 93). Thus, he makes an explicit connection between the conception of logic as the condition or essence of thought and a picture of thought as achieving something that no sign, written or spoken, can achieve, of thought as a 'representation as

such'. This is on a par with Russell's thinking of naming 'as some remarkable act of mind', as 'an occult process' which occurs in the medium of the understanding.

The idea of logic as the essence of thought is clearly one that Wittgenstein himself is committed to in the *Tractatus* (*TLP*):

To give the essence of a proposition means to give the essence of all description, and thus the essence of the world. (*TLP* 5.4711)

In the *Tractatus*, Wittgenstein expresses this common essence by means of a variable:

$$[\overline{p}, \overline{\xi}, N(\overline{\xi})]$$

This variable is the general form of a truth-function: every proposition is a truth-function of elementary propositions. In arriving at the general propositional form, Wittgenstein takes himself to have clarified how propositions symbolize in the way that they do. Language is shown to be the totality of propositions with sense. A proposition with sense has true/false poles, and thus the concept of a truth-function is essentially interwoven with that of a proposition. Kuusela is clearly right when he suggests that Wittgenstein's commitment to this conception of the essence of representation is one of the principal sources of the dogmatism which characterizes the early work.

Thus, Wittgenstein's commitment to the idea of the essence of a proposition in the *Tractatus* leads him to insist on a sharp distinction between a proposition and a name: a name is a simple constituent of a proposition; a proposition is essentially logically articulate or complex. Only something that is logically complex or articulate can express a sense, that is, have true/false poles. His idea of the essence of a proposition leads him to conceive of the logic of our language as essentially truth-functional, and thus already present in any language that is projected onto the world, and in which the truth-functions are already presupposed. In this way, truth-functional logic is taken to be the essence of all representation: logic is everything that is essential to the projection of any system of representation onto the world. This conception of the essence of a proposition is also connected with the idea that the sense of a proposition is essentially determinate. Any proposition that a proposition logically entails is held to be part of its sense; the process of analysis consists in the explicit expression of everything that is

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entailed by the truth of a proposition, which anyone who understands the proposition must already grasp. This in turn allows Wittgenstein to present all inference as grounded in truth-functional entailment: one proposition can be inferred from another if it is truth-functionally contained in the other.

The dogmatism and idealization implicit in this conception of the logic of our language are important elements in what Wittgenstein now sees as his early tendency to make logic something sublime. All of the above ideas contribute to the idea of a language more exact, more determinate, and less complex than our own. However, there is a further aspect to the idea of sublimation implicit in this characterization of Wittgenstein's early conception of the logic of our language as the essence of representation, and which the focus on the general form of a proposition does not bring out. It is the idea of a proposition—the thought which a sentence is used to express—as a projection of a propositional sign onto reality. This is the picture of thought as a remarkable act of mind: to mean something by the words one utters is to project the propositional sign onto the world in such a way that it becomes the correlate of the particular state of affairs which it is used to represent. Wittgenstein expresses the idea in the *Tractatus* as follows:

We use the perceptible sign of a proposition (spoken or written) as a projection of a possible situation.

The method of projection is to think the sense of the proposition. (TLP 3.11)

The idea of a thought as achieving something which no mere sign can achieve, as a unique representation of a state of affairs, is not, as Kuusela suggests, merely a consequence of Wittgenstein's commitment to a common essence of representation, which leads to the idea of the 'real sign'—the fully analysed proposition—behind the sentences of ordinary language. Rather, it is fundamental to our tendency to think that 'something extraordinary, something unique, must be achieved by propositions' (*PI* 93), 'to purify, to sublime, the signs themselves' (*PI* 94). It is this tendency to think that there is something behind the signs—some act of projection—which gives them life, that is to say, a meaning, which Wittgenstein expresses in *PI* 95:

When we say, and *mean*, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: *this-is-so*.

Thus, the tendency to sublime includes the tendency to picture meaning as an act of mind in which a sign becomes a symbol which can be compared with reality for truth or falsity. It is the idea that, in the act of meaning or thinking, the mind flies beyond itself, 'as if by means of [thought] we had caught reality on our net' (PI 428).

4. We see both of these ideas—the idea that the answer to the question 'What is a proposition?' 'is to be given once for all; independently of future experience' $(PI\,92)$ and the idea that 'A proposition is a queer thing' $(PI\,94)$, 'Thought must be something unique' $(PI\,95)$ —entering into Wittgenstein's characterization of our tendency to sublime the logic of our language. The two ideas are clearly closely connected. If logic is the essence of representation, then wherever there is representation there is logic. And where there is logic, there must be perfect logical order; logic requires that sense be determinate. A thought must achieve something unique: it must be an unambiguous representation of a state of affairs.

Thus, Wittgenstein clearly connects the idea that 'there must be perfect order even in the vaguest sentence' (PI 98), that a 'sentence must... have a definite sense' (PI 99), not only with our tendency to assume that logic is the essence of representation, but also more specifically with our tendency to picture thought (meaning) as a remarkable act of mind in which we picture, or represent, a determinate state of affairs to ourselves. It belongs to the essence of thought that a thought, unlike a sign which is spoken or written, must not admit of any ambiguity or require interpretation: it must, in its nature as a representation of a state of affairs, be completely clear or determinate: a thought is—essentially—the thought that this-is-so: 'An indefinite sense—that would really not be a sense at all' (PI 99). Here he clearly links the idea of subliming, not merely with the idea of logic as the essence of representation, but with the picture of thought 'as a queer process' (PI: 196), 'the unique correlate, picture, of the world' (PI 96).

Thus, it seems that there is more to the process of sublimation than is captured by the idea that we have a tendency to take the characteristics of a restricted set of examples, or of one particular paradigm, to apply to all cases, for example, of names or propositions. There is a suggestion that it is not merely a craving for generality which led Russell to picture naming as a queer connection between a word and an object, or which led Wittgenstein to insist that 'a proposition is a propositional sign in its projective relation to

order, or hear a word and understand it.

the world' (*TLP* 3.12). The tendency to sublime the logic of our language is, in part at least, a tendency to picture the act of naming as an act in which the mind is, in some mysterious way, directed onto an object; or to picture thought as an act in which the mind, in some mysterious way, projects a propositional sign onto the world. Thus, we are tempted to sublime the acts of meaning, naming, representing, and thinking themselves and elevate them to the status of occult or miraculous acts of mind. Wittgenstein's own early, dogmatic claims about the essence of a proposition and the possibility of a certain sort of analysis, as well as Russell's dogmatic insistence that 'this' is the only genuine name, are seen to be connected with this tendency to picture meaning or naming as an occult process that occurs in the mind when we understand a sentence. Insofar as the later philosophy is characterized as 'turning the examination round', it can be seen as an attempt to 'de-sublimate' our tendency to picture naming, meaning, and so on as mysterious acts of mind. This means overcoming, not only the

5. In PI 100, Wittgenstein suggests our tendency to sublime the logic of our language springs, at least in part, from a misunderstanding of the role of the ideal. The ideal that he is thinking of here seems to be the idea of language as an exact calculus which is operated according to precise rules. We picture logic as the essence of representation as such, he suggest, when we suppose that this 'ideal "must" be found in reality' (PI 101). Thus:

temptation to assume that names or propositions share a common essence, but also the temptation to think that something astonishing, something queer, happens when we grasp the meaning of a sentence, understand an

The strict and clear rules of the logical structure of propositions appear to us as something in the background—hidden in the medium of the understanding. I already see them (even though through a medium): for I understand the propositional sign, I use it to say something. (*PI* 102)

To think that logic is the essence of representation is to picture a proposition as a determinate combination of logical elements within a system of representation in which the whole of logic is already present. In striving for the complete expression of the sense of a sentence which I use to represent a possible state of affairs, we see ourselves as aiming to uncover what must already be there, occurring in the mind, when I use a sentence to say

something. We misunderstand the role of the ideal when we imagine that an ideal representation of the sense of a sentence must already be there in reality, in order for me to mean anything by it.

At PI 104, Wittgenstein characterizes this misunderstanding of the role of the ideal as follows:

We predicate of the thing what lies in the method of representing it. Impressed by the possibility of a comparison, we think we are perceiving a state of affairs of the highest generality.

This is clearly connected with the aspect of subliming which Kuusela is inclined to privilege: the tendency to take what are merely properties of our model as characteristics which must be common to all cases. Thus, the exact calculi which we construct in philosophy are taken as a model of the essence of language, and are not seen for what they are: something with which our language can be compared. At least part of what is involved in Wittgenstein's attempt to resist, or counter, our tendency to sublime the logic of our language, or to picture thought as an ideal representation of a state of affairs, is to get us to recognize the real status of the models that we construct in philosophy:

For we can avoid ineptness [unfairness] or emptiness in our assertions only by presenting the model as what it is, as an object of comparison—as, so to speak, a measuring-rod; not as a preconceived idea to which reality *must* correspond. (PI 131)

Only in this way, he suggests, can we avoid 'the dogmatism into which we fall so easily in doing philosophy' (PI 131).

Thus, at least part of what is involved in throwing off 'the preconceived idea of [the] crystalline purity [of logic]', and in 'turning our whole examination round', is developing a non-dogmatic approach in philosophy, in which models, examples, descriptions, analyses, pictures, and so on are no longer understood as attempts to capture 'the incomparable essence' of language, meaning, thought, and so on. Rather, they are to be treated as 'objects of comparison which are meant to throw light on the facts of our language by way not only of similarities, but also of dissimilarities' (PI: 130). But how does this work in practice? Let us look at a particular case.

In PI 92, Wittgenstein appears to acknowledge that he is still concerned in his investigations with the question of the essence of language. However,

he indicates that he believes that he went about answering this question of essence in the wrong way. And one of the things that he now thinks was wrong with his early approach—and which we might take as an instance of the dogmatism which he now wishes to avoid—is that he sought to answer the question of essence—'What is language?', 'What is a proposition?'—as if the answer 'is to be given once for all; and independently of any future experience' (PI 92). But how are we to understand the suggestion that a question about essence, which is surely answered a priori, is not to be answered 'once and for all'? And what role is 'future experience' thought to play in settling a question of essence? Does PI 92 indicate that Wittgenstein has abandoned the idea that proposition is a formal concept, and that he now takes it to be an empirical concept whose extension, and even essence, has to be settled by means of experience? This would be an extraordinary view to take, given Wittgenstein's general concern to avoid confusing the logical and the factual. But is there an alternative interpretation?

One alternative is not to deny that proposition is a formal concept. Thus, Wittgenstein clearly still thinks that the expression 'proposition' picks out a logical category, or a way of symbolizing, a kind of symbol. In the same way, he still holds that the concepts of a name, a number, or a colour are also formal concepts, which characterize a way of symbolizing, or a kind of symbol. However, what he now seems to recognize is that, in another sense, these concepts are just like any other: they are ordinary expressions which have a use in our language. And if we want to become clear about these concepts, then we need to approach our task of clarification in the same way in which we generally approach the task of explaining a concept in ordinary life, namely, by means of examples. Thus, in *PI* 135, he writes:

Asked what a proposition is—whether it is another person or ourselves that we have to answer—we shall give examples and these will include what one may call inductively defined series of propositions.

The idea of an 'inductively defined series' reflects the fact that proposition is a formal concept. The examples that we give will present a method for the construction of propositions, which Wittgenstein connects with the use of the words 'and so on'. Thus, we might give examples of material propositions incorporating predicates of one-place or more, general propositions, mathematical propositions, and so on. In each case, our examples indicate a rule for the construction of propositions such that, any symbol that is

constructed according to that rule will be a proposition. There is clearly no suggestion that the examples that we give are exhaustive. Rather, as in any definition, the examples are broken off and we end by saying 'These and other similar things are called propositions.' And the pupil either understands it or not. And if he does understand it, then he can go on to identify examples of propositions—for example, scientific laws—which may not have been included in the original list.

However, Wittgenstein also appears to suggest that what we call a proposition is not something that is fully settled, 'once and for all'. Are the words 'Slab' and 'Block', for example, as they are used in the languagegame of PI 2, propositions? Well, we could call them 'sentences'. In Philosophical Grammar (PG) (p. 112), he imagines that commands such as 'Come here!', 'Go there!' are replaced by pointing gestures. Would we call the pointing gesture a proposition? It has the same use, as it were, as 'Come here!' and 'Go there!' And what, he asks in PG, about the early speech of children, where signs are used only to express a desire for a particular object? Or what of a case in which someone merely gives signs of acceptance or rejection? The implication is that there is no principled answer to these questions. In some cases, we might want to include these things as propositions; in others, not. We might define the word, on a particular occasion and for a particular purpose, in a way that settles the question, but this is not to be understood as settling it 'once and for all'. Or we might simply acknowledge that there is an order here, with things at the beginning being clear cases of mere gestures and things later in the series being clear cases of the use of propositions, but with no point at which a clear boundary between the two can be drawn. You could see the order that Wittgenstein presents in PI 244—'A child has hurt himself and cries; and then adults talk to him and teach him exclamations and, later, sentences'—as an example of this sort of transition, from something which clearly is not language to something that clearly is, via an intermediate case. And this kind of ordering could be important because it draws attention to the fact that the roots of our propositional language-game may lie in primitive, spontaneous gestures, a connection which is obscured when we think only in terms of representation and truth and falsity.

It is also part of the process of de-sublimation, in which Wittgenstein is now engaged, to point out that the category of things we call 'propositions' is not logically unified. In the *Tractatus*, he was inclined to restrict the term

'proposition' to those symbols that have a sense—that is, true/false poles and to deny the status of genuine proposition to symbols that have a sentential form—for example, the propositions of logic and mathematics—but lack a sense. He does not now claim that he was wrong to impose this restriction on what counts as a proposition, but he wants to draw attention to the fact that this is not to use the word 'proposition' as we usually do. However, he is still interested in noting the sort of logical distinctions that he now thinks he 'sublimed' in the Tractatus. So although, given our ordinary use of the word, we would quite correctly call '2 + 2 = 4', 'I'm in pain', 'Time passes', 'There is only one zero' (examples he gives on p. 113 in PG) 'propositions', this does not bring them any closer logically to 'This table is brown', 'I am 5'9"', or 'All men are mortal.' It is only by attending to the sort of use these sentences have—how they are employed in our life with language—that we understand how they symbolize, that is to say, how they function. And when we pay attention to this use—to what Wittgenstein calls their 'depth grammar' (PI 664)—we see that the uses of these different kinds of sentence are absolutely unlike.

The concept of a proposition, like the concept of a number, is also one, Wittgenstein points out, which might be extended in ways not currently anticipated. I learned these concepts through examples, but in a sense they lead beyond themselves, for the possibility of construction is implicit in them. We have only to reflect on the development of mathematics, or of science, or of psycho-analysis to recognize that the concept 'proposition' is not rigorously circumscribed. We are free to invent. There is a certain freedom of movement here. Thus, 'the use of the words "proposition", "language" etc has the haziness of the normal use of concept words in our language. This does not make them unusable' (on p. 120 in *PG*).

Thus, one central aspect of what is involved in the process of desublimation is our coming to see that 'logic speaks of sentences and words in exactly the sense in which we speak of them in ordinary life' (on p. 121 in PG). Logic is not concerned with some completely determinate ideal which lies behind our use of ordinary signs, and which can only be reached through analysis. A central part of 'turning our examination round' involves finding a way to approach language so that we are no longer dazzled by the image of the ideal, or led to assume that it must be there in reality, when we think the sense of a sentence. Thus, the idea of the general form of a proposition—an abstract representation of the common essence of all

representation—is replaced by the idea of a 'perspicuous representation', whose aim is that we come to 'command a clear view of our use of words' (PI 122). This we do through the description of a range of examples, real and invented, by means of comparisons, by coming to see an order in our mastery of the use of expressions (as in PI 244), and so on. We do this as a means to counter misunderstandings arising from our temptation to idealize or to treat a central case as if it were a paradigm, and with no suggestion that answers to questions of essence are 'to be given once for all; and independently of any future experience'.

In this respect, Wittgenstein does not regard everything he said in his early philosophy as wrong; that is the wrong conception of the sort of mistake he made. It is rather that, by being in thrall to the idea that logic is the essence of representation as such, he ends by dogmatically putting forward a conception of how the expressions of our language function that is more unified, more determinate, less open-ended, less plastic, than ours is: he took the properties of an idealized representation of language for properties of the reality. ('We predicate of the thing what lies in the method of representation' (*PI* 104).) By attending to our ordinary use of the central concepts—language, name, proposition, and so on—we will see that things are very much messier, very much more open-ended, and very much more complicated, than we had supposed. If we attend to the use of words in our life with language, the description of our concepts that emerges is always more complicated, less determinate, more open-ended than we are initially inclined to think.

6. But what of the other aspect of our tendency to sublime the logic of our language: the temptation to picture meaning as a remarkable act of mind, in which the propositional sign is projected onto reality? Although, as we have seen, this temptation is linked with the idea that logic is the essence of representation, I have suggested that we need to separate the two ideas, and recognize that the picture of thought as a unique representation of a state of affairs is a powerful temptation, as it were, in its own right: 'When we say, and mean, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: this-is-so' (PI 95). This temptation to imagine that acts of meaning, thinking, understanding, and so on achieve something which no mere sign could achieve is one which Wittgenstein addresses over and over again in the Investigations: it is what is

in focus in the discussion of what is involved in the idea that 'Slab!', in the language of PI 2, means the same as 'Bring me a slab', in our language; of what it is to mean 'Five slabs' as a report rather than an order; of what it is to mean the colour rather than the shape when we ostensively define the word 'red'; of what it is to understand the word 'cube' when we hear it; of what it is to understand the system of natural numbers or to grasp the rule of a mathematical series; of what it is to mean addition by '+'; of what justifies our saying 'Now I can go on', and so on. In all these cases, Wittgenstein's concern is to overcome our temptation to think that what is involved is a remarkable act of mind: an act of mind which occurs behind the accidental accompaniments to hearing the word 'cube', or thinking of a mathematical formula, or saying the words 'Five slabs', and which 'in some unique way predetermined, anticipated—as only the act of meaning can anticipate reality' (PI 188). In this case, the process of de-sublimation means getting us to see that 'nothing out of the ordinary is involved' (PI 94).

In this case, Wittgenstein's concern is less with our craving for generality, and more with our tendency towards a certain form of psychologism: to picture naming, meaning, understanding, and so on, as mental acts which, in some mysterious way, point beyond themselves, or catch reality in their net. His response is not merely to try to show that there is a range of cases with no shared essence, but to try to get us to see that the very idea of such acts of projection is a chimera. The techniques he employs are various; they include asking us to look carefully at what goes on in particular cases in which we suddenly understand, or suddenly see the solution to a problem, to consider how we teach someone the words 'I meant NN', 'I said suchand-such to myself', 'I calculated in my head'; to reflect on the criteria by which we judge that someone has grasped a rule, meant the shape rather than the colour, understood an order, mastered the system of natural numbers, calculated, inferred, and so on. We counter the temptation to picture thought or meaning as a remarkable act of mind by focusing on how we operate with words in our life with language, that is, by coming to see clearly 'something that lies open to view and that becomes surveyable by rearrangement' (PI 92).

I want to suggest that we might see this methodological development in Wittgenstein's approach to the task of understanding what meaning, or thinking, or understanding are—what these things amount to—as part of a shift towards a highly distinctive form of naturalism which characterizes

his later work. Wittgenstein himself emphasizes this naturalistic turn when he remarks that '[w]hat we are supplying are really remarks on the natural history of human beings' (PI 415). This form of naturalism has nothing to do with the kind of scientific naturalism that is associated with the idea of accounting for all phenomena in terms of the conceptual resources of the natural sciences. It is closer to the Aristotelian form of naturalism defended by John McDowell, although in Wittgenstein's case, the principal influence appears to be Goethe, whose conception of how to understand the phenomena of nature is self-consciously opposed to the reductive approach of scientific naturalism.

This alternative form of naturalism is characterized, in part at least, by a particular kind of approach to the task of understanding the phenomena of language, in which a whole variety of techniques is employed: looking at things in context, looking carefully at particular cases, tracing connections, looking at how something develops or unfolds in time, recognizing patterns, and so on. The approach is associated with the rejection of hypotheses and explanation, in favour of pure description; with the use of analogies and comparisons; with the avoidance of dogma; with the appeal to the reader's full sensuous awareness of phenomena; and with the attempt to make phenomena present to the imagination. It is by means of remarks that exploit these methodological principles that Wittgenstein tries to overcome the intellectual temptation to sublime the phenomena of naming, meaning, thinking, and so on into extraordinary mental acts, and to get us to recognize 'that nothing out of the ordinary is involved'. I want to end by seeing how we can trace this approach to the task of de-sublimation at work in *PI* 108.

7. Let us return, then, to PI 108. I have suggested that 'the preconceived idea of crystalline purity' is to be understood as our tendency to sublime the logic of our language: to conceive of it as the essence of representation as such, and thus to treat it as something pure, with no taint of the empirical. And I have suggested that this conception of logic is connected with a general tendency to picture thought or meaning as 'a queer process', by means of which a propositional sign is projected onto reality. So conceived, logic constitutes the 'incomparable essence' of language: it constitutes everything that is essential to the process of projection of a propositional sign, by means of which the world is represented. Logic, on this conception, is something

absolute and non-negotiable: to express thoughts about the world at all is already to think in accordance with the laws of logic. Logic is prior to truth insofar as it is everything that is essential to a sign's being used to 'say, and *mean*, that such-and-such is the case'.

Wittgenstein's earliest critical engagement with the Tractatus expresses his growing realization that this preconceived idea of the logical order of our language is unsustainable, once we begin to compare it with the actual facts of language use. Thus, he is quickly forced to recognize that exclusion relations between propositions containing colour predicates cannot be reduced to formal contradictions; that propositions that are elementary, in the sense of being free of logical constants, are not logically independent of one another; that propositions containing the sign for generality cannot be analysed into logical products and logical sums of elementary propositions; and so on. He comes to see, in other words, 'that what we call "sentence" and "language" has not the formal unity that I imagined': truth-functional logic is not the essence of representation; it is not the case that everything that we call a proposition is a value of the variable corresponding to the general form of a truth-function; not everything we call a proposition is 'a result of successive applications to elementary propositions of the operation $N(\overline{\xi})$ '.

The idea that logic is the essence of representation is one that Wittgenstein arrives at in response to his dissatisfaction with Russell's and Frege's conception of logic as a system of maximally general truths. The view of logic that Wittgenstein presents in the *Tractatus* preserves, however, the idea that logic is the necessary condition for all thought that aims at truth, that is, which represents what is the case. The 'preconceived idea of the crystalline purity' of logic is thus tied up, for Wittgenstein, with the mythology of thought as a 'queer process' in which the mind projects a propositional sign onto reality. The crisis that is provoked by realizing that the idea that logic is the essence of representation is unsustainable is that it seems to deprive logic of its absolute status: what does the necessity of logic—'its rigour'—consist in if it does not constitute 'the strict clear rules' (*PI* 102) that are essential to our saying anything at all? Wittgenstein's response to the crisis is to point out that it is illusory:

But what becomes of logic now? Its rigour seems to be giving way here.—But in that case doesn't logic altogether disappear?—For how can it lose its rigour? Of course not by our bargaining any of its rigour out of it. (*PI* 108)

Our practice of inferring has whatever rigour it has. It is not something that has to be bargained for, or grounded in a philosophical theory that secures its rigour, or necessity, for it, by showing that it is essentially already present in any system within which the world is represented. If we want to understand the source of logic's rigour, then we must forget our preconceived idea of crystalline purity, which goes along with the idea of thought as a representation as such, and turn our examination towards our actual practice of inferring. The turn is away from the idea of a logic for a pure realm of thought or representation and towards our actual practice of inferring one sentence from another. Thus, Wittgenstein counters the tendency to sublime logic by turning our examination away from thoughts, conceived as unambiguous representations of states of affairs, and towards our practice of operating with signs, to the language-game of inferring: there you can see what sort of thing inferring is. It is, I am suggesting, this attempt to counter our tendency to sublime both logic and the phenomena of meaning and understanding by means of the distinctive, naturalistic method of the later philosophy that in part constitutes the 'turn' that Wittgenstein recommends in PI 108. Our real need—the need to understand the nature and status of logic, to understand its peculiar 'rigour' or necessity—remains, but our examination must be turned, away from the picture of 'some non-spatial, non-temporal phantasm' (the idealized, apotheosized idea of thought as a remarkable act of mind in which a particular state of affairs is represented), towards 'the spatial and temporal phenomenon of language' (what goes on when we actually infer, that is, derive one sentence from another according to a rule).

The rest of the penultimate paragraph of PI 108 makes clear that turning our eyes towards 'the spatial and temporal phenomenon of language' does not mean that we have lost sight of the 'musts' that characterize logical inference, and are settling instead for mere empirical description of phenomena. For, as Wittgenstein says, 'it is possible to be interested in a phenomenon in a variety of ways'. What we are interested in is the question of what follows from what, what can be inferred from what, and we can be interested in this in just the way we can be interested in the rules of chess, and not merely in the physical moves that are made during a game. We can see the same idea of the turn at work in Remarks on the Foundation of Mathematics (RFM), when Wittgenstein raises the question: What does inferring really consist in? In RFM I, 6), he is concerned to overcome our

tendency to be '[m]isled by the special use of the verb "infer" into imagining 'that inferring is a peculiar activity, a process in the medium of the understanding'. The idea of the turn comes in when he tries to get us to 'look at what happens' when we infer and to recognize that '[t]here is nothing occult about the process; it is a derivation of one sentence from another according to a rule; a comparison of both with some paradigm or other, which represents the schema of transition; or something of the kind'. This is, of course, not something that goes on 'in the medium of the understanding', but 'may go on on paper, orally, or "in the head". Nor is it essential that we consult a paradigm. It may be that all that occurs is 'our saying "Therefore" or "It follows from this" or something of the kind'.

Wittgenstein goes on, 'We call it a "conclusion" when the inferred proposition can in fact be derived from the premise.' But, he asks, 'what does it mean to say that one proposition can be derived from another by means of a rule?' (RFMI, 7). Does it mean 'going by the rules of inference'? or does it mean 'going by such rules of inference as somehow agree with some (sort) of reality' (RFM I, 8)? The latter idea expresses the Platonism which he has been opposed to from the beginning; the former reflects the naturalistic approach to the task of understanding the nature of inference, which I am suggesting characterizes his later work. The point is to get us to see inferring as part of our natural history: as a procedure that human beings carry out in the course of countless practical activities in which they engage. It is, he tries to show, against the background of these practices—our actual, concrete engagement in the procedure of inferring in the course of our practical lives—that it makes sense to speak of the existence of a rule, which in turn gives sense to talk of what can be inferred, or of what must be inferred. There is no longer any sense that we *must* infer this way, but there remains a sense that we do infer this way, and taking part in this practice means that one *must* derive this from that. That is what it is for there to be a practice of inferring: it means you cannot say what you like, you must say this, if you accept that. The rigour of logic is not something that can be bargained out of it, for that would mean the end of all inferring: a procedure that is embedded in countless activities in our life with language.

Thus, what Wittgenstein has come to see in the intellectual journey that *PI* 108 describes, is that his own early view of logic expressed a tendency to sublime the phenomenon of thought, a failure to see it as part of our natural history. The naturalism, which I am suggesting arises out of Wittgenstein's

attempt to overcome this tendency to sublime, does not represent an attempt to ground the necessities of logic in something empirical (how human beings think), it is not in that sense a theory of logic at all. It is rather an approach to the task of understanding the nature and status of logic, one in which the idea that philosophy is not concerned with explanations or groundings, but with description, comes of age. Describing, reporting, naming, inferring, calculating, and so on are all part of our natural history. We have only to look into 'the workings of our language'—into what goes on when we give a report, obey an order, infer, calculate, grasp the connection between a name and the thing named, and so on-in order to understand them. But we must do this 'in such a way as to make us recognize those workings: in despite of an urge to misunderstand [i.e. to sublime, idealize, apotheosize] them' (PI 109). Hence the importance of looking at particular cases; at the context in which expressions are employed; at how we teach someone the meaning of a word, to follow a rule; at the criteria by which we judge whether they have grasped the principle of a series, obeyed an order as it was meant; and so on. The view of our use of expressions that we thereby achieve is realistic, and thus helps us to resist the false idealizations, myths, and hypostatizations which our tendency to sublime the logic of our language gives rise to, and which are a perpetual source of paradox and puzzlement.

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Two Cheers for the 'New' Wittgenstein?

BRIAN MCGUINNESS

My remarks in the present chapter were occasioned in the first place by the publication, can one say the manifesto?, The New Wittgenstein (Crary and Read 2000), but they will, I hope, be intelligible also to those who have not read it, partly because I am asking a slightly higher order question, not the question, What have they found new in Wittgenstein? But why are they even looking for something new? There seems to be some general prejudice (not theirs only) against other people's views of what Wittgenstein was about. Other people's approach seems to be wrong, rather than what in detail they say. A slight confirmation of this I found in a brief interchange I had some time ago. I made fun of the movement in a feeble joke, which I hope I shall be forgiven for repeating—that the project reminded me of the advertising agency in a New Yorker cartoon who are bugged by something in the proposed slogan, 'New! Improved! Mom's Old-fashioned Apple Pie!' One of the editors of the volume wrote in saying (kindly, in a way) that I was one of the people chiefly responsible for the view of Wittgenstein that his contributors wanted to contest and that I would do well to address their theses in what I write. I therefore procured a copy of the book only to find that there was in it no reference to writings of my own in which I have tried to deal with the matters discussed. Nor do they mention, as Marie McGinn has pointed out in an excellent critique (McGinn 2006), views from which I learnt much—those of Rush Rhees

 $^{^{\}rm 1}$ My review was in the TLS for 12 June 2002 and Dr Read's letter was in the same journal on 26 June 2002.

and Hidé Ishiguro—which, like some of my own, diverge from the 'Oxfordoxy' the New Wittgensteinians ascribe to my colleague and fellow translator David Pears and to Peter Hacker (who is, to be sure, given the right of reply in their volume). There is the same silence about the correspondence with Paul Engelmann and the series of thinkers whose influence on Wittgenstein I and others have tried to illustrate—Weininger, Boltzmann, Hertz, and Spengler. The novelty sought is, as it were, akin to the first commentators' attempts to explain Homer by Homer.

As it happens I was not wholly in disagreement with the New Wittgensteinians on the point particularly at issue: in the review that gave offence I point out precisely that Wittgenstein originally wrote an *Abhandlung* that ended with the remark that the propositions of logic said nothing and that there were no propositions of ethics. The mystical passages were added later, and this for intelligible doxological reasons.² And if I may quote with due reserve the Thersites of our subject, Laurence Goldstein, he thinks me a resolute reader of the text—before the term was coined (Goldstein 2002: 423). What I do seek is to read the writings in their context and above all in their genre, trying to see Wittgenstein in his habit as he lived. The difficulty is (and it explains much) that he was a complicated character and his writings are no less so. They do not lend themselves to straightforward reading and there are structural reasons, as I shall hope to illustrate, for which the texts are almost bound to contain, at first sight, many theses and the contradictories of them. *Hic liber est*, we used to say in my youth,

Hic liber est in quo quaerit sua dogmata quisque, Invenit et pariter dogmata quisque sua.³

At the end we shall perhaps be able to see whether every reading of Wittgenstein must be a new one: that is why there is so much mutual incomprehension.

The interpretation of the mystical and other passages in the *Tractatus* is a matter on which I have given my views to the world several times, beginning with an article on mysticism in 1966, not to mention earlier

² For the detail of this see 'Wittgenstein's (1916) "Abhandlung" (McGuinness 2002d), but I refer to it already in 'The Unsayable, a Genetic Account' (McGuinness 2002c), see also McGuinness (2002b).

³ 'Each seeks his own creed in this book,/To find it, each has but to look.'

but well-remembered work on the translation with David Pears.⁴ For this reason, and also because I am well persuaded of an essential unity in the work of Wittgenstein (unity in what I have sometimes called his intellectual project) I should like to illustrate my point, beginning from his later teaching and writing and commerce with his friends.

Since his ways were often odd, it is important not to get into the position of defending Wittgenstein. I had rather not be his advocate because that would hinder my efforts to understand him, and in particular to understand the striking effect he had on others whether they knew him or not. An important feature here (noted by many-I think of Georg Kreisel and J. P. Stern) was his determination to see everything as if for the first time. That is, of course, not at all a simple matter. It must be with a schooled eye that one sees something so, if it's to be of any use, as with the legendary mathematical professor who interrupts his lecture and walks round the quad before coming back and saying 'Yes, it is obvious'. Or like Descartes who advises running through proofs again and again until one can see the result following. These, at any rate, are related phenomena. In Wittgenstein's case, there is the agonizing over examples and what we feel inclined to say and crude errors even, which yet have some attraction for us, and then the erlösende Wort-what Housman would have called lucida tela diei.⁵ I suppose the process of getting there sometimes seems like thrashing around, a cat in the cage—though even in that case there may be more method than we think. People are able to see this in his written remarks: the rhetoric that there undoubtedly is in them has served its purpose.

The style then of his writings, or compilations, is dictated by this, by the desire to bring the reader into discussion and make him go through all the hoops. A sort of Platonic dialogue, if the comparison be permitted. It's essentially a colloquial style, as Wittgenstein insisted. Very far from Max Beerbohm, but the same effect is sought, the reader is carried along with the *flâneur*, views are put to him in a friendly manner and then he is convicted of agreeing with more perhaps than he meant to.

Now this isn't Russell's style, which aims to be more Voltairean, assuming a different kind of agreement from the start: a complicity rather in the

⁴ My general view of the *Tractatus* is still perhaps best indicated by Chapter 9 of *Young Ludwig* (McGuinness 2005), originally published 1988.

⁵ 'The word of deliverance', 'bright shafts of daylight'.

idea that all that's needed is a brisk intelligence and fairly elementary aims in life. It's this aspect (I think) that led Wittgenstein to describe 'What I Believe' as 'durchaus nicht harmlos'. 6 'What wouldn't one give for a little depth!' is another attributed remark. Principles of Mathematics is a really serious work, with very little of the impish in it, and that line in Russell's writings Wittgenstein approved of. Before the First World War, Russell sometimes wrote in a vaguely mystical style: it looks as if Wittgenstein didn't approve of this particularly ('some of your Philosophical Essays' are said to be, lamentably, on the level of Moore's Principia Ethica⁷). After the war, Russell, like many contemporaries, became more down to earth, indeed aggressively what the Germans call (or called) diesseitig (attached to this world): it was Wittgenstein who had become, inexplicably in Russell's eyes, a mystic. The war for him had had the opposite effect and his book might have been called 'Logic and Mysticism', reversing the order of Russell's 1914 title. The eponymous chapter in that volume, as I argued in 1966 (McGuinness 2002a), had some influence on Wittgenstein. More recently, as mentioned above, I have shown how (in Wittgenstein's case) the mysticism got added in later to a work substantially complete, which indeed was probably intended to be entitled simply 'Logic'. The style of the Tractatus is a separate problem: it has aphoristic conclusions in common with later writings but the steps for getting there have been pruned—we find some of them in the Notebooks. As it stands, printed, it's a kind of parody of Principia Mathematica, trying to show that and how logic ought to do without words.

But it's not a matter of liking Russell's style or Wittgenstein's better: what the one wants to say couldn't be said in the manner of the other. To use one of Wittgenstein's similes (and once again with apologies for the comparison): to imagine otherwise would be like imagining what Goethe looked like when composing the Ninth Symphony.

⁶ 'Far from harmless.' Wittgenstein's remark is recorded in *Wittgenstein and the Vienna Circle* (Waismann 1979: 142) (probably the reference is to Russell's article in *Forum* 82 (1929) which maintains that genuine love united with intelligence suffices to generate all the moral rules that are necessary).

⁷ First recorded letter to Russell, item 1 in Wittgenstein in Cambridge (McGuinness 2008).

⁸ The philological confirmation of the point is recent: I had long thought that the addition of religious and mystical themes had been occasioned by the stresses of combat and the spiritual aspirations of the Olmütz circle.

A particular reason for the nature of Wittgenstein's style resides in a very deep feature of his character (verifying at least for himself his insistence that *le style c'est l'homme même*—not just 'the style is the man', the style is the essence of the man). It is a general difficulty not just with the idea but also with the practice of communication. An interesting parallel that occurs to me is Menger's story of coming away with Gödel from a discussion of language in the Vienna Circle during which both mathematicians had kept silent—in doing so they had, as Menger remarked, 'out-Wittgensteined those Wittgensteinians': Gödel replied, 'The more I think about language, the more it amazes me that people ever understand each other' (Menger 1994: 210).

A good introduction to this feature of Wittgenstein is his correspondence—in particular that with Engelmann. He says again and again that on serious matters he can only talk face to face: if a letter won't work to secure complete communication, a treatise certainly won't. I would connect this with his approach in his lecture on ethics, a subject, as he said to Schlick and Waismann, in which there could not be a treatise. It would be a book that would blow up all other books. He can only talk on these matters, he said, to his Cambridge audience in the first person. And indeed all his talking was in the first person, not that it was egoistic, but that it took the other person by the throat and insisted on a real relation not an artificially limited one, so Iris Murdoch said (it was true of her too and part of what made her formidable). Thus one student who went to make Wittgenstein's acquaintance found that the first meeting ended with Wittgenstein weeping over his own sins. *Cor ad cor loquitur*: it is not the usual pattern of advice from a teacher to a beginner.

In intellectual as well as personal matters (and it is difficult in Wittgenstein's case to distinguish the two, at least he refused to do so himself), part of what needs to be conveyed is the process of thinking that has gone into what is being said, not just the completed result. But there is more to it than this: the way a thing is said, what it costs is part of what is being said. Thus a written confession would be worth less than one spoken and delivered face to face—and indeed he took care to recite his own in person in 1937

⁹ All the more ironical, as I have pointed out elsewhere, that deontic logic, a subject than which none could be more un-Wittgensteinian, was the creation of his chosen successor and literary legatee, G. H. von Wright, who, to be sure, always said that he was not really a *pupil* of Wittgenstein's.

^{10 &#}x27;Heart speaks to heart', J. H. Newman's motto.

(though there was a failure of naturalness in its being read out from a text, as seems to have been the usual case).

These things can be seen affecting the production of what we think of as his works. The 'Notes on Logic' began with his feeling that he must dictate from his notes in the presence of Russell. A slightly later version of his thoughts was dictated to G. E. Moore. Then there was the period in Olmütz when Wittgenstein could not utter what he wanted to say—seemed even to have difficulty in articulation—until Engelmann extracted it from him as with a forceps. In the early thirties, he tried to collaborate with Waismann on a book presenting his ideas; Gordon Baker had just finished a collection of the material when he so prematurely died (Baker 2003). 11 It is interesting that it is not identical with other typescripts or manuscripts in Wittgenstein's Nachlaß. The collaboration of others, even if, as sometimes, it consisted in no more than their taking dictation, made him put his ideas in a form which they could accept. Later in Cambridge he depended on Miss Ambrose and Skinner for his dictation: it was a delicate balance, and with Skinner alone (when—to the sadness of both of them (tears again)—he had broken with Miss Ambrose) he continued in a different way. 12 All the tergiversation and the scrapping of versions of his work in the thirties are part of the same phenomenon. When he determined to put everything that could be saved into a new volume (we know it as MS 142) he brought it to Vienna and dictated from it in the presence of his sister Gretl in long sessions sustained by hot soup sent in by another sister. What he needed, but could never accept, was a good editor: instead he got literary heirs who could precisely not perform the task of interacting with him. The more their good will, the greater their loyalty, the less they could modify his material and make it natural, turning what risked being a monologue into the dialogue that it was meant to be.

Where is this taking us? Is this just a literary problem, to which a genius, a Plato, say, would have found a solution? One naturally thinks of his *Phaedrus*, the most eloquent demonstration that real philosophy cannot be found in a book (but it is a book). Well, perhaps in Wittgenstein's case the

¹¹ Of course, the ill-titled (but rich in content) *Principles of Linguistic Philosophy* (Waismann 1997) (the 2nd edition (Macmillan 1997) should be procured if possible) was also the result of this collaboration.

¹² Professor Arthur Gibson of Cambridge is working on the enlarged or revised 'Brown Book' that thus resulted. We shall see, but my first impression is that the revision throws things back into the melting pot or (in another metaphor) is an unravelling rather than a tying up.

difficulties cancel out and the nature of the content shines through. It is meant to be a dialogue, positions are tried out, even absurd ones—we remember his remarks to Oscar Wood at his one Oxford talk: 'Say, something crude, say what you really think, and we shall get somewhere!'13 The style thus corresponds to the aim, which is the active and co-operative comprehension by reader and writer of the philosophical predicament. There is something to be said on each side but it is easy to tip over into absurdity. Then it is that a reminder of the obvious has a revelatory effect. The examples are familiar to us all—the man who shows how tall he is by putting his hand on his head, the purchase of two copies of the daily paper for reassurance as to the truth of its reports, the Frenchman who finds that only in French do words come in the order one thinks them. The hygienic or therapeutic effect of this requires that the confusions be recreated, 14 thus the codification of the method in a doctrine or theory is impossible. The moment you take the obvious slogan without the context that makes it have a point you are turning a wheel not attached to any engine, to use another of Wittgenstein's similes.

This raises difficulties for the diffusion of his thought. Favourite or faithful pupils realized that they weren't meant to be missionaries: 'I'm quite aware that I'm not good enough to,' wrote Taylor from Berkeley (McGuinness 2008: item 231), 'but three or four intelligent people have been keen to discuss with me...and I've discussed quite a bit, sort of jumping when they said wrong thing the way Moore does, and this hasn't been quite useless to them or to me I think.' Ryle when asked whether he had been influenced by Wittgenstein said, 'I learned a lot from him', and Wittgenstein was perhaps reacting to just this attitude when he accused Ryle of 'not having his own problems'. Actually Ryle's problems can be traced back to before his acquaintance with Wittgenstein, but one sees that Wittgenstein in general feared the adoption by others of solutions when the chief point was the path to them. Particularly might he fear the adoption of his solutions, knowing that this could come for the wrong reasons. 'Whatever you said,' C. L. Stevenson wrote, looking back on his year in Cambridge (McGuinness 2008: item 162), 'you said with such tremendous

¹³ (Information from Philippa Foot.) The remark is parallel to Wittgenstein's paraphrase of St. Augustine, 'What, you swine, you want not to talk nonsense! Go ahead and talk nonsense, it does not matter.' This is in the context of Heidegger and the limits of language (Waismann 1979: 69).

¹⁴ Not wholly unlike Aristotle's method of discovery by resolving aporiai.

vigour and conviction, that I was always tempted to believe it without further ado, simply because of the strength of your personality.' (Stevenson found a defence against this in 'a certain urbanity'.)

The personality is still there, in the style, and this is perhaps the most general explanation of the New Wittgensteinians: each generation goes through the debates of the Moral Science Club with the same passion, sensing that only so, only by engaging anew with the author (and not by reading handbooks) can the message that seems to be hidden (and with what art!) be arrived at. A later generation will find new terminology, as it were, new crutches. Literary criticism is replaced by literary theory and so (I suppose) on.

The most obvious general effect aimed in Wittgenstein's work (written and oral) is the hygienic or therapeutic one, and to some this seemed the whole purpose. Waismann's 'How I See Philosophy' was in fact drawn from conversations with Wittgenstein (another constatation we owe to Gordon Baker), though Waismann had come to think of it as his own, confusing the sharpened formulation with the original idea, which was deliberately vaguer. The therapy is not just a catharsis: there is an element of seeing the world aright at the end. There is something positive in the impossibility at the root of much of the thought, something to be learnt from the impossibility—of which Barry Stroud has told us more¹⁵—of providing an account of the origin or nature of thought or language, something positive in the hostility to theory. To put the matter in both its moral and its intellectual aspects, we are not masters of everything but survey things from within a whole that we cannot define—there is a bedrock (a favourite image) which sets limits to our language and our life. The inconclusiveness of the literary form shows the nature of our philosophic insight.

But if this is right, then we see that the lesson of the later writings is not after all so different from that of the *Tractatus* (another rediscovery by the New Wittgensteinians), though another set of stylistic devices is there employed to convey it. There too the impossibility of describing language from the outside is demonstrated. The argument proving the essential bivalence of the proposition is a circular one, depending on determinacy of sense. Another aspect of the same circularity is the Fregean paradox that

¹⁵ In his 'Meaning and Understanding' (2011).

the sense of a proposition depends upon the meanings of its components, yet at the same time the components only have meaning in the context of a proposition. This is part of the general difficulty of producing a theory of language as such, which, I have indicated, will appear in his later philosophy. And then, for the earlier period, there is the unsayability of the propositions about ethics and the sense of the world. We have to (that is to say we have to if we are to understand what Wittgenstein is up to) see that these absurdities are the necessary result of seeking to go outside language, as we feel driven to do. Wittgenstein condones it in Heidegger, and again in the *Lecture on Ethics* he sees the tendency to run up against the limits of language as one that he would by no means condemn. Philosophy itself is such an attempt, and we must recognize both its attractions and the impossibility that it should bring us to port. There is much of Browning's Rabbi ben Ezra, with his 'fancies that broke through language and escaped' about Wittgenstein.

But Laurence Goldstein thinks that my long-held conviction that the ladder propositions themselves are nonsensical and can be thrown away is possible but highly improbable. This only shows that Dr Goldstein, for all his *enfant-terriblisme*, is a simple enough fellow at heart. If the thesis were not 'improbable' it couldn't possibly be true and certainly wouldn't appeal to Wittgenstein. Bourgeois thinkers do not realize that desperate measures are required. 'Bourgeois thinker'—this was Wittgenstein's reproach to Ramsey. I know it came after, and think it came because, Ramsey no longer accepted Wittgenstein's critique of foundations of mathematics as such and was prepared to avoid problems in the notion of identity which he had previously regarded as fatal to Russell's position.¹⁶

Perhaps the right answer to Goldstein is to point to the multifarious nature of nonsense. Even logic and ethics (both 'transcendental') lead to nonsense in different ways. The approach, the error, the temptation is a different one. And in the wider sense, that used in Wittgenstein's Collection of Nonsense, 'T we could say in his own phrase, 'There are countless kinds.' The slogan 'Nonsense is just nonsense', used by the New Wittgensteinians,

¹⁶ I here put the matter from what I take to have been Wittgenstein's point of view. It remains true that Ramsey, when he wrote for the *Encyclopaedia Britannica* in 1926 thought Wittgenstein had the complete answer to Russell's problems, whereas in his article "The Foundations of Mathematics" in 1926 (Ramsey 1926) he adopted the sort of device I have indicated to get round Wittgenstein's objections.

¹⁷ For some idea of its contents, see my 'In Praise of Nonsense' (McGuinness 2006).

is itself nonsense. We are not talking of gibberish: Wittgenstein is interested in something that is worth talking about because it seems to have a sense 18 and there are many different ways in which this can happen. The absurdities in his own collection earn their place for many different reasons—there is popular science, its application to religion, advertising, spiritualism, parapsychology, British war propaganda where Russell was described as 'a man who stands for things that are really worth fighting for', the vanity of authors (one of them leaving instructions to his future biographers), G. H. Hardy's A Mathematician's Apology, and more serious instances such as the Nazi argument that Christ could not have been a Jew (he said things that were later recognized as wisdom by the Aryan race). Nor are the persons involved always those one would expect—Einstein is there as well as Russell and Joad. There is practically no end to the list: quot homines tot stultitiae, there as many forms of folly as there are men. True there are patterns—very often there is a blurring of level, a sort of category mistake—Lehár is taken seriously as a composer, a bird-feeding station is erected to commemorate a disarmament congress, a New Year's Eve is organized for those tired of life (the Suicide Club?), the Vatican Radio is inaugurated 'In Nomine Domini', a statue of Einstein is included in the frieze round the portal of the Cathedral of St John the Divine—no one will agree with all the examples chosen but someone will agree with each. This apparently harmless hobby is only one instance of an important theme in Wittgenstein's life and thought. His memorial tablet in Trinity College Chapel, composed by his friend Burnaby¹⁹ describes him, in a noble phrase, as verum adsequendo singulari integritate deditus—'there was a singular integrity in his devotion to the pursuit of truth'. Integrity we will readily claim for him, but was truth precisely his aim? Was it not rather clarity? He was from the start a specialist in sense and nonsense, one of the chief and first exponents of a philosophy we find in Frege, Husserl, Ryle, and the early Carnap. It was the avoidance of nonsense and vacuity in argument that preoccupied Sraffa and himself in their

¹⁸ A quotation from a manuscript of 1937 (MS 116: 59), but it reminds one of 'der Sinn im Unsinn' ('the sense in nonsense') which Freud found so useful in analysing jokes (*Jokes and the Unconscious (Der Witz und seine Beziehung zum Unbewussten*) (Freud 1968)).

¹⁹ John Burnaby, at one time named by Wittgenstein as his executor, was the author of *Amor Dei* (Burnaby 1938), a study of St Augustine, which Henry Chadwick describes as 'the greatest of intellectual biographies [scil. of Augustine]' *Saint Augustine—Confessions*, translated... by Henry Chadwick, Oxford (1991. p. xxvii). That Burnaby composed the memorial is stated in *Inscriptions from the Chapel of Trinity College, Cambridge* (a college publication) 1990.

discussions, which covered a great variety of subjects. The intellectual exercise was more important than the current topic. There were other areas where it was not so much the avoidance of nonsense that was the point but the recognition of what sort of nonsense it was. We can and should learn from nonsense. I have already mentioned the talk to the Heretics Club (the 'Lecture on Ethics') where he applauded or at least refused to ridicule 'the tendency...to run against the boundaries of language' but there are two further remarks from 1937 and 1946 respectively where the necessity of nonsense is (a bit more hesitantly) acknowledged. During his retreat (it was almost that) in Norway in the earlier year he came to think that there were stages in religion, 'In religion it has to be the case that to every level of religiosity there corresponds a form of expression that has no sense at a lower level.'20 A notebook of 1946 contains an interesting discussion of religious themes. In what sense can God be the Giver, the Gift, and the Giving? and the like. Wittgenstein comments, 'One could say, "To want to talk this sort of nonsense is a passion without which man is just a huckster." That's not my opinion, but I can understand it." This (the Incarnation is clearly meant) was the paradox, the absurd, the Abracadabra for Kierkegaard too²² and Wittgenstein stopped short of embracing it, but only just.

The chief novelty of the New Wittgensteinians (now almost overtaken by time) is that they, in opposition to more traditional philosophical and literary critics, propose a theory for how Wittgenstein (of all people!) should be read. I say 'of all people' advisedly, because we are dealing not with a text or a set of texts but a man, a man with a certain history and development outside his printed works. Even if it be true that his style is the real, the essential, man, we have a profusion of texts from which (in many cases) editors have had to select, and we can observe development and changes of opinion. Above all, we find changes of topic as fresh interests were aroused by the concerns (nearly always reinterpreted for them) of those surrounding

²⁰ MS 120 20.11 (1937).

²¹ MS 130 7 26.5 (1946). Not included in *Culture and Value* (Wittgenstein 1999), perhaps to avoid a predominance of religious themes? The passage translated reads: 'Man könnte sagen: Diese Art von Unsinn zu reden, das ist eine Leidenschaft, ohne welche der Mensch nur ein Krämer ist.'

²² Kierkegaard is referred to in Waismann (1979: 68) and a dozen or so times in the Norwegian notebooks of 1932 and 1937 (Somavilla 1997). For a balanced discussion of this connexion (also in relation to the New Wittgenstein), see Schönbaumsfeld (2007).

Wittgenstein,—Russell, Ramsey, Moore, Sraffa, the Watsons (W. H. and A.), Malcolm (a sample list)—each can be correlated with a subject matter that occupied Wittgenstein for a period. His reading, surprisingly well chronicled in his notebooks and letters, also inspired his topics as well as his methods: the clearest and last example is Goethe's *Farbenlehre* picked up in Vienna in 1949–50, which led to *Remarks on Colour* (Wittgenstein 1977).²³ There are, and were for him, a profusion of philosophical problems, and a corresponding variety of attacks, with at most a family resemblance in the method governing them. Thus each passage in his writings should be seen against the appropriate background. A natural meaning, which does not too much clash with what we know Wittgenstein to have said elsewhere, must be extracted. An iron rule will not serve—agreeably to his own view on rules (rules, perhaps, in another sense). If every reader is tempted to make up his own rules, perhaps this is not far from the intention. *Plurimi pertransibunt et multiplex erit scientia*.²⁴

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²³ For the Vienna episode, see McGuinness (2008: items 416–18).

^{24 &#}x27;Many shall pass through and knowledge will be manifold' (Daniel 12.4; Vulgate), a motto used at the Bodleian and other libraries.

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